1991 CROP

HARD RED SPRING WHEAT QUALITY REPORT

Physical, Chemical, Milling, and Baking Characteristics

United States Department of Agriculture
Agricultural Research Service
North Central Region

HARD RED SPRING WHEAT QUALITY REPORT

on samples received from the 1991 crop

Source:

Spring and Durum Wheat Quality Laboratory
USDA, Agricultural Research Service
Harris Hall, NDSU
Fargo, North Dakota 58105

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
in cooperation with
STATE AGRICULTURAL EXPERIMENT STATION

QUALITY EVALUATION OF HARD RED SPRING WHEAT CULTIVARS

1991 CROP[1/]

by

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1/ This report represents cooperative investigations on the quality of Hard Red Spring Wheat Cultivars from the 1991 crop. Some of the results presented have not been sufficiently confirmed to justify varietal release. Confirmed results will be published through established channels. Cooperators submitting samples for analysis have been given analytical data on their samples prior to release of this report. This report is primarily a tool for use by cooperators and their official staff and to those individuals having direct and special interest in the development of agricultural research programs.

This report was compiled by the Agricultural Research Service, U. S. Department of Agriculture. Special acknowledgment is made to the North Dakota State University for use of their facilities and the services provided in support of these studies. The report is not intended for publication and should not be referenced in either literature citations or quoted in publicity and advertising. Use of the data may be granted for certain purposes upon written request to the agency or agencies involved.

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TABLE OF CONTENTS

1991 COOPERATING AGENCIES AND STATIONS

The cooperative agencies and stations conducting the varietal plot and nursery experiments from which the 1991 spring wheat samples were received are listed below:

University of California, Davis

Imperial Valley

New York State College of Agriculture
and Life Science Cornell University

Ithaca

Minnesota Agricultural Experiment Station

Crookston, Morris, St. Paul

Montana Agricultural Experiment Station

Bozeman, Sidney, Havre

North Dakota Agricultural Experiment Station

Minot, Langdon, Dickinson, Williston,
Carrington, Prosper, Casselton

South Dakota Agricultural Experiment Station

Redfield, Brookings, Selby

Idaho Agricultural Experiment Station

Aberdeen

Wyoming Agricultural Experiment Station

Powell

1991 COOPERATING AGENCIES AND STATIONS (cont.)

Washington Agricultural Experiment Station

Pullman

Wisconsin Agricultural Experiment Station

Madison

A complete list of all cooperating agencies, stations, and personnel for the year will be found in the report by R. H. Busch, et al., Wheat Varieties Grown in Cooperative Plot and Nursery Experiments in the Spring Wheat Region in 1991.4/

4/ Busch, R. H. Wheat Varieties Grown in Cooperative Plot and Nursery Experiments in the Spring Wheat Region in 1991. Agricultural Research Service, U. S. Department of Agriculture and State Agricultural Experiment Station, St. Paul, MN.

INTRODUCTION

Samples of standard cultivars and new selections of hard red spring wheat grown in cooperative experiments in spring wheat regions of the United States are milled each year by the USDA/ARS, Wheat Quality Laboratory. Wheat and their corresponding flours are evaluated for physical and chemical properties, and the flours are baked to determine bread characteristics. The purpose of this report is to make available to the cooperators and other interested parties, quality data on the standard varieties and new selections of hard red spring wheat from the 1991 crop.

The same general format and techniques were used in evaluating the wheat as outlined in quality reports from previous years. The same computer scoring system has been used for the past several years, hence some faulting values differ slightly from earlier years. In general, data contained in this report are comparable to data in past reports. Statistical data is included for each cultivar and experimental line from the Uniform Regional Nurseries.

The evaluation of a wheat sample involves the analysis of kernel characteristics, milling performance, and baking performance. A brief description of testing methods employed is shown on pages 10 to 12 of this report. The various characteristics and any outstanding features or deficiencies of each cultivar are evaluated from results of these tests. No specific comments are made regarding mixogram patterns derived from samples. However, reference mixograms, shown on page 23, illustrate ranges from which sample mixograms may be compared.

SOURCE OF THE 1991 CROP SAMPLES

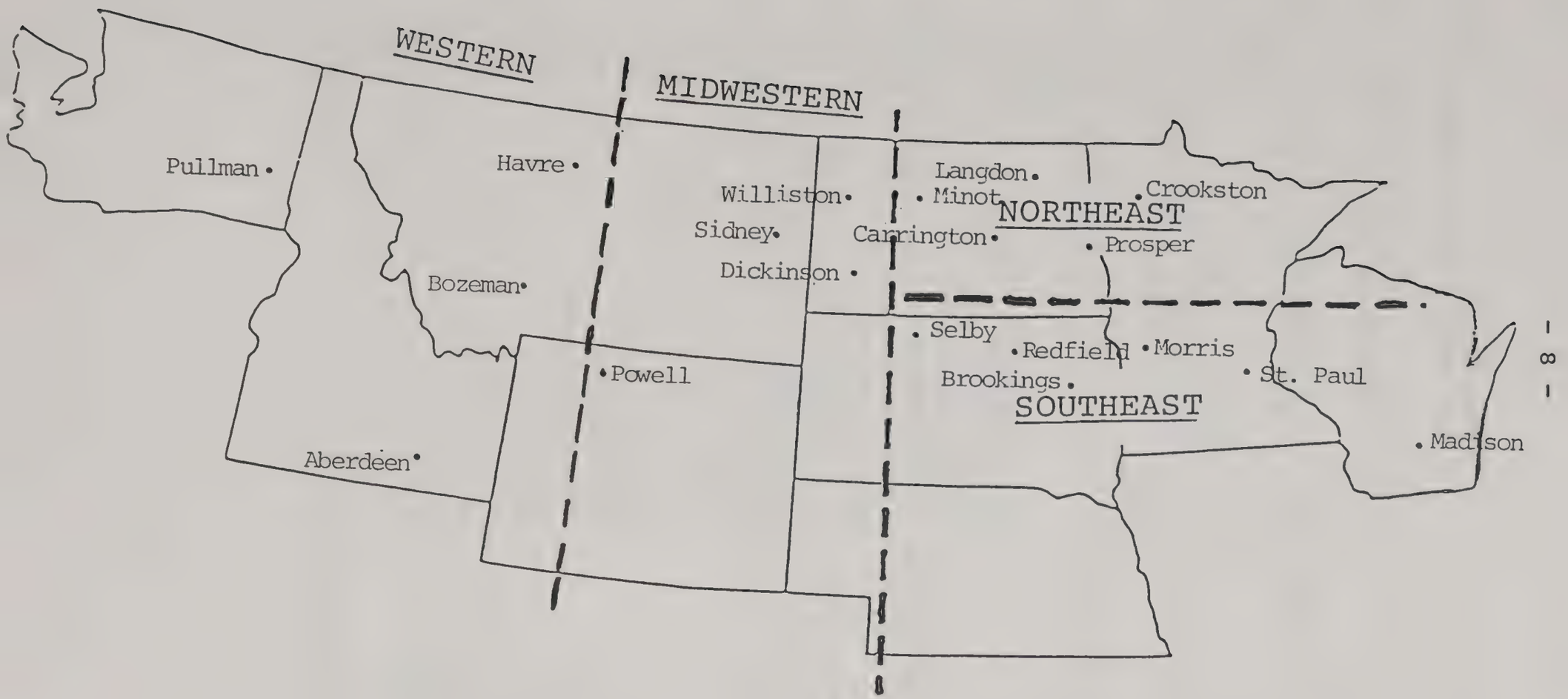
Tests were performed on 1622 samples which were received from 22 stations in 10 states. However, data on 938 samples is excluded from this report, because the information was of interest only to plant breeders at specific experiment stations.

Data presented in this report represents the evaluation of spring wheats received from Field Plot Nurseries and Uniform Regional Nurseries. The following stations were cooperators:

California:	Imperial Valley
Idaho:	Aberdeen
Minnesota:	Crookston, Morris and St. Paul
Montana:	Bozeman, Sidney and Havre
New York:	Ithaca
North Dakota:	Minot, Langdon, Dickinson, Prosper Williston, Carrington, and Casselton
South Dakota:	Redfield, Brookings and Selby
Washington:	Pullman
Wisconsin:	Madison
Wyoming:	Powell

UNIFORM REGIONAL NURSERY TRIALS

The geographical areas from which the samples were received are shown on page 8. Spring wheat cultivars and experimental lines included in the Uniform Regional Nursery trials are listed on page 9. The Western and Midwestern areas were comprised of four stations each, the Northeastern area five stations, and the Southeastern area six stations. The geographical areas tend to represent the movement of wheat in the market. Contrary to previous reports which presented data on wheat blends from these geographical areas, samples tested from the 1991 crop were not blended. Included in this report is statistical data on quality factors of each cultivar or experimental line from each geographical location.



Georgraphical areas from which wheat samples were obtained.

ENTRIES IN
THE UNIFORM REGIONAL HARD RED SPRING WHEAT PERFORMANCE NURSERY

The 32 entries in the 1991 URHRSWPN are listed below:

Entry No.	Cross or Variety	CI No. or Selection No.	Year Entered	Source
1.	Marquis	3561	1929	Canada
2.	Chris	13751	1969	USDA-MN
3.	Stoa		1987	ND
4.	Era**	13986	1972	USDA-MN
5.	Butte 86		1987	ND
6.	SD3055	ND604/SD2971	1990	SD
7.	SD3056	ND604/SD2971	1990	SD
8.	SD3080	Butte 86/SD3004	1991	SD
9.	SD8072	SD8052/SD2971	1991	SD
10.	SD8073	SD8052/SD2971	1991	SD
11.	SD8074	SD8052/SD2971	1991	SD
12.	MN87150**	MN82008/Vance	1990	USDA-MN
13.	MN88170**	MN84139/MN74103	1991	USDA-MN
14.	MN88189**	MN84139/MN84565	1991	USDA-MN
15.	MN88320**	MN84377/Wheaton	1991	USDA-MN
16.	MN88334**	MN4436/Vance	1991	USDA-MN
17.	ND655**	Stoa's'/ND617's'	1990	ND
18.	ND657**	ND622's'/Cutless	1990	ND
19.	ND662**	ND603//ND517-2*7/Agent	1991	ND
20.	ND671	Stoa's'/ND620	1991	ND
21.	ND672**	Grandin/ND620's'	1991	ND
22.	XW398A4	MN7375/SD2903	1991	NDSUDF
23.	N86-0542**	Nordic/Norseman	1990	AGRIPRO
24.	N87-0306**	HS81-0074/MN7357	1991	AGRIPRO
25.	N88-3136	Sinton/Stoa	1991	AGRIPRO
26.	N88-3034	Sinton/Stoa	1991	AGRIPRO
27.	N87-467**	Wheaton/Probrand 711	1991	AGROPRO
28.	FA987-350**	MSFRSP	1991	WPB
29.	CI982-309**	MSFRSP	1991	WPB
30.	AC-Minto	BW120(Col/BW63//Kat/BW552)	1990	AGRICAN
31.	BW148	BW83(ND499/RL4137)ND585	1991	AGRICAN
32.	ID367		1991	ID

** Semidwarf

METHODS

Following are terminologies and testing methods used in the evaluation process:

Test Weight Per Bushel - The weight per Winchester bushel of cleaned, dry wheat subsequent to passing the sample through a Carter-Day dockage tester.

1000-Kernel Weight - The weight of 1000 kernels was determined by counting, using a Seedburo seed counter, the number of kernels in 10 g samples of cleaned, hand-picked wheat.[5/]

Kernel Size - The percentages of the size of kernels (large, medium and small) were determined using a wheat sizer as described by Shuey[6/].

The sieves of the sizer were clothed as follows:

Top Sieve - Tyler #7 with 2.92 mm opening
Middle Sieve - Tyler #9 with 2.24 mm opening
Bottom Sieve - Tyler #12 with 1.65 mm opening

Milling - The samples were cleaned by passing the wheat through a Carter-Day dockage tester and through a modified Forster scourer (Model 6). The clean, dry samples were pretempered to 12.5% moisture for at least 72 hours, then tempered to 15.5% moisture and allowed to stand overnight prior to milling.

5/ Mention of a trademark name or a proprietary product does not constitute a guarantee or warranty of the product by the U. S. Department of Agriculture, and does not imply its approval to the exclusion of other products that may also be suitable.

6/ Shuey, William C. A Wheat Sizing Technique for Predicting Flour Milling Yield. Cereal Science Today 5:71-72,75 (1960).

The Uniform Nursery Regional spring wheat samples were milled in a Brabender Quadrumat Junior mill. The mill was equipped with a #18 wire on the drum sieve from which the overs were classified as bran. The throughs of the #18 wire were rebolted for one minute on a Strand sifter equipped with a #60 Tyler sieve. The throughs of the #60 wire were classified as flour and the overs were classified as crude shorts.

The Field Plot Nursery samples were milled on a Buhler continuous experimental mill. The Buhler mill had been slightly modified for better comparison with commerical milling operations. Break scalping sieves were clothed with #54 stainless steel wire. Reduction scalping sieves were clothed with #58, #66 and #105 stainless steel wire for the first, second and third reductions, respectively. All flour sieves were clothed with #135 stainless steel wire.

The six flour streams obtained from Buhler milled wheat were combined and represented patent flour. The extraction of a good milling wheat using this flow is approximately 68% and is comparable to a commercial "long patent" extraction flour. At a 68% flour extraction, changes in flour ash are most sensitive to changes in percent extraction.

Hardness Test - Wheat hardness scores are determined according to AACC Method 39-70A. The procedure involves grinding the wheat samples in a Udy grinder and obtaining reflectance data from a Technicon 400 near infrared analyzer. Wavelengths used were 1680 nm and 2230 nm. This procedure was developed by Mr. Karl Norris, USDA, Beltsville through a co-operative research project in which the Hard Red Spring and Durum Wheat Quality Laboratory also participated. Hard red spring wheats generally have scores between 60 and 85.

Protein Content - Wheat and flour proteins were determined from NIR reflectance data, the Kjeldahl procedure, or Leco Nitrogen determinations. Nitrogen values, as determined the Kjeldahl procedure or Leco, were multplied by 5.7 to calculate protein values.

Mineral or Ash Content - Wheat or flour ash was determined by measuring the residual weight of minerals remaining after incinerating the sample for approximately 16 hours at 575^{0}C. The results were reported as percentages of the sample weights.

Mixograph Analysis - Mixograms for each flour sample were determined by using 30 g of flour and adding 20 cc of water. The sensitivity spring setting was set at 10. All mixograms were run with constant weight of flour and volume of water. Absorptions reported were adjusted according to the peak heights of the mixograms. Correction factors were determined from a series of flours by varying the amount of absorption.

Mixogram Patterns - Reference mixogram patterns shown on page 24 illustrate the different types of mixograms that were obtained. A single number is assigned each pattern to characterize and simplify the classification of the curves. The larger numbers indicate stronger curve characteristics.

Baking Procedure and Formula - Following is the baking formula used:

100% flour	3% Non-fat Dry Milk
2% salt	3% yeast
5% sugar	2% shortening (Crisco, melted)

Samples were mixed to optimum dough development in National Manufacturing mixers, the micro mixer for 25 g samples and the 100 g special mixer for 100 g samples. Bromate (10 ppm) for oxidation and barley malt flour (0.106%) for enzymatic supplement were added to each sample. All doughs were moulded in a Roll-Er-Up moulder. Samples undergo 3 hour fermentation, 1 hour proof and 20 minute bake time.

Absorption - The amount of water, expressed as percent of flour, required for optimum dough consistency.

Crumb Color - A value was determined by comparing the crumb color of the tested sample with the crumb color of a baking standard. The standard flour was an equal blend of the variety Len grown at Casselton and Minot, ND, and Crookston, MN.

Loaf Volume - The volume of the baked loaf as determined by rapeseed displacement.

All values (protein, ash and absorption) were reported on a 14% moisture basis.

DISCUSSION

The following discussion presents the basic techniques and criteria used in the quality evaluation of the Hard Red Spring Wheat cultivars. Evaluations are based on the categories of kernel characteristics, milling performance, and baking score.

Each evaluation category is important. For example, a sample could be of a sufficiently poor quality for a given category to suggest elimination from future testing. However, a sample submitted for the first time and found to be questionable should be tested again to confirm previous evaluations. A sample which is consistently rated as questionable should be discarded.

Five kernel characteristics (test weight, 1000 kernel weight, percent small kernels, wheat ash, and wheat protein) were independent variables used to calculate the dependent variable, wheat score. Four milling characteristics (percent extraction, ash content @ 65% extraction, flour protein, and milling character) were used to calculate the dependent variable, mill score. Seven characteristics (mixogram pattern, bake absorption, mixing time, dough characteristics, crumb color, crumb grain, and loaf volume) were used to calculate the dependent variable, bake score. These three dependent variables become independent variables used to calculate a dependent variable, the general evaluation, which is an overall general score.

The current computer program used by the Wheat Quality Laboratory was designed and implemented to perform the analysis and tabulation of data generated from each station. The program has been in operation for nine years and utilizes the Statistical Analysis Systems (SAS Institute, In., SAS Circle, Box 8000, Cary, NC 27511).[7/]

Wheat samples are tested and data collected on 18 quality factors or variables. The computer program then grades each factor against predetermined faulting values and assigns major (MJ) or minor (MI) faults where applicable. The data is then broken down into 3 major areas which relate more directly to agronomic, industrial, and consumer requirements. Each sample is assigned a score of 4 in the areas of Wheat Characteristics, Milling Characteristics, and Baking Characteristics. The program then adjusts the score (4 = Good promise, 3 = Some promise, 2 = Little promise, 1 = No promise) depending upon the number of major and/or minor faults assigned to that sample.

7/ Nolte, L.L., Youngs, V.L., Crawford, R.D., and Kunerth, W. H. 1985. Computer program evaluation of hard red spring wheat. Cereal Foods World 30:227-229.

A general score is a numerical score of 1-4 and is determined by calculating the mean of the other 3 scores - wheat characteristics, milling characcteristics, and baking characteristics.

The following tables list the variables used in each scoring area and their specific faulting and scoring values.

WHEAT SCORE

Variables Included	Faulting Limits Minor	Faulting Limits Major	Effect on Score Minor	Effect on Score Major
Test Weight (#/bu)	57.9	56.9	-	-1
1000 Kernel Weight (g)	Mean-2.1	Mean-5.1	-	-1
Small Kernels (%)	8	18	-	-1
Wheat Ash (%)	1.71	1.81	-	-
Wheat Protein (%)	13.9	12.9	-1	-2

MILL SCORE

Variables Included	Faulting Limits Minor	Faulting Limits Major	Effect on Score Minor	Effect on Score Major
Flour Extraction[a/] (%)	Mean-2.1	Mean-4.1	-1	-2
Flr. Ash @ 65% Ex.[b/] (g)				
Large Samples	.47	.51	-	-1
Small Samples	.57	.61	-	-1
Flour Protein (%)	12.9	12.4	-1	-1
Milling Character[c/]	3	2	-1	-2

a/ The mean, or average, is calculated using the standards tested with that station.

b/ Large samples are milled on a Buhler experimental mill, and small samples are milled on a Quadrumat Jr. experimental mill. Different values are used to compensate for differences in the efficiency of the two mills and their respective procedures.

c/ 5 = Normal. 4 = Normal-soft. 3 = Soft-normal. 2 = Soft. 1 = Gritty. 0 = Very soft.

BAKE SCORE

Variables Included	Faulting Limits Minor	Faulting Limits Major	Effect on Score Minor	Effect on Score Major
Mixogram Pattern[a/]	2,7 or 8	1,or 9-11	-	-1
Bake Absorption (%)	61.9	60.4	-1	-2
Mix Time (min.)	5.75-8.00 or 2.00-2.75	over 8.00 or 0-1.75	-1	-2
Dough Characteristic[b/]	6	4 or less	-	-2
Crumb Color[c/]	75	50 or less	-	-1
Crumb Grain[d/]	80	50 or less	-	-1
Loaf Volume[e/] (cc) Lg.	Mean-55	Mean-105	-1	-2
Sm.	Mean-21	Mean-31	-1	-2

a/ Refer to reference mixograms for numerical curve pattern. (1 = very weak, 11 = very strong)

b/ 9 = Elastic. 7 = Slightly pliable.
5 = Very pliable. 4 = Bucky
2 = Very, very pliable. 0 = Dead.

c/ 100 = Soft, white
80 = Soft, slightly creamy
60 = Creamy
40 = Very creamy
20 = Dull, very gray

d/ 100 = Close, elongated, and uniform cells; fine grain and thin walls; soft texture.
80 = Slightly open, elongated cells; fine grain and thin walls; soft texture.
60 = Open, elongated to round cells; fine grain and thick walls; slightly coarse texture.
40 = Open, round cells; coarse grain and thick walls; coarse to rough texture.
20 = Irregular, open and large cells; coarse grain and thick walls; rough or soggy texture.

e/ Average values are calculated using the standards tested with that station. "Lg." refers to the faulting and scoring values for 100 g. loaves. "Sm." refers to the faulting and scoring values for 25 g. (pup) loaves.

All samples were compared with a milling and baking standard representative of the crop year. Agronomic and climatic conditions of the individual locations can affect the quality of the wheat such that the evaluation of all samples, including commercial cultivars, harvested from these locations may be classified as questionable to unsatisfactory. Therefore, the evaluation ratings from one station may not be compared with ratings from other stations, but only provide a comparison within that station. For example, an area may produce low protein wheat with large and plump kernels, good milling performance, and good kernel characteristics, but with low flour protein and unsatisfactory baking performance such as short mixing time, low loaf volume, and weak dough characteristics. The wheat from this area could not be considered a strong spring wheat and would not maintain the quality expected from the spring wheat producing area. An acceptable variety should have tolerance to a wide range of environmental conditions.

Kernel Characteristics are important in determining the initial value of wheat. Poor kernel characterisitics could disqualify a new variety from further consideration. Because of the present wheat grading system, high test weight is desirable. Plump kernels are desirable because of their high ratio of endosperm to bran. Low 1000-kernel weight and small kernel size distribution affect milling performance due to their high ratio of bran to endosperm. Wheat ash is an important factor when comparing one cultivar against other standard cultivars. Wheat with a high mineral content may yield flour with a high ash content. Wheat protein quality and quantity must be considered as an important characteristic when comparing cultivars grown at the same location. Wheats with low protein values are undesirable since protein affects baking performance.

Milling Performance is a very important characteristic of spring wheats. Low extraction and high flour ash are major factors unacceptable under commercial milling operations. Flour mineral contents are reported at a constant extraction of 65% so that flour extraction rates among cultivars are easily compared. As a general rule, an increase of 0.01% in ash content is equivalent to an increase of approximately 2% in flour extraction.

Milling characteristics: Wheat comprising soft kernels requires different milling techniques when compared with wheat of uniform hard kernels. On commercial mills flowed for hard vitreous spring wheats, the introduction of soft wheats into the mill will result in milling problems. Likewise, a sample which is extremely hard and vitreous will mill differently. Both types of wheat (soft and vitreous) require different roll pressures, clothing, sifter surface, and temper to be milled properly. The blending of normal bread wheats with soft wheats or extremely hard, vitreous wheats is undesirable since they are not compatible in the milling operation. Normal to soft score indicates that the sample shows a tendency toward softness of character on the flour mill stocks and extraction. Adjustments would either have to be made in the milling flow or in tempering procedures to compensate for differences in kernel hardness. Properties of soft wheat may or may not be compatible with other wheats. Therefore, maintaining pure varieties with uniform milling characteristics is important.

The amount of protein recovered in flour from wheat is important. High protein wheats yielding low protein flours are not desirable. Such wheats would contain much of the protein distributed in the outer portion of the kernels resulting in excessive protein in the feed streams. Therefore, higher protein wheat would be necessary to yield a flour with protein content comparable to that of a wheat that yields optimum flour protein.

Mixogram Patterns are important in estimating the strength and mixing tolerance or potential mixing tolerance of a flour. From the standard mixogram patterns shown on page 23, patterns 6 - 8 indicate flours with optimum mixing tolerance and gluten strength. Mixogram patterns 9 - 11 indicate flour samples with long mixing times, and strong gluten characteristics, whereas, patterns 1 - 5 indicate flours with weak gluten characteristics and short mixing times. Both the pattern and length of the curve are important, and both must be considered in the evaluation. Abnormal curves, such as sway-back or long initial times to incorporate water, indicate undesirable characteristics.

Baking Evaluation takes into account the flour water absorption, mixing time, dough characteristics, loaf volume, crumb texture, and machinability. Flour samples with low water absorptions would be unsatisfactory. Samples with extremely short mixing times would relate to weak gluten characteristics and be considered undesirable. Samples evaluated in the minimal range for these values require further testing to determine whether definite deficiencies exist.

Doughs having mellow to weak properties show a tendency towards weakness. Doughs having mellow to strong properties show a tendency to be strong, whereas, doughs having strong to mellow properties show a tendency to be mellow. Since these characteristics are evaluated by subjective means, the tendencies are estimated which allows for double grades.

The crumb grain or appearance of the interior of the loaf shows how well the sample stood up during baking and may indicate some deficiencies which have been observed during the baking test. Crumb grain is likely related to gluten protein properties (quantity and quality).

Bread loaf volume indicates potential strength of doughs in a different manner than mixing time or dough characteristics. Optimum loaf volume demonstrates the capacity, or lack thereof, for the dough to expand under pressure and to contain the entrapped gases during expansion. Weak doughs are like balloons which burst when blown up. They tend to collapse and yield breads with low loaf volumes, or yield breads with extremely large volumes containing large holes in the interior. Low protein flours produce extensible doughs which exhibit properties similar to putty. These doughs do not expand adequately during fermentation or baking and thus produce bread with low loaf volumes. Tough and very bucky doughs are bound too tightly and impede expansion of the gases resulting in breads with low loaf volume. Loaf volume is a characteristic probably related to gluten functionality in the dough.

Statistical Data including mean, SD, minimum and maximum values, variance, and coefficient of variation are shown for each cultivar within the four geographical areas - Northeast, Southeast, Midwest, and West. This data provides information on the variability of each selection within the Uniform Regional Nurseries for each of the parameters measured.

UNIFORM REGIONAL NURSERY SAMPLES - 1991 CROP

Discussion of URN

A total of 615 URN samples were received from 19 stations in 8 states. Twenty-seven URN selections were experimental lines and the remainder were commercial cultivars. Along with the experimental lines, the cultivars Butte 86, Chris, Era, Marquis, and Stoa were included in the statistical analysis of the URN samples. Each sample was evaluated for kernel characteristics, milling performance, and baking properties. Some selections were not included in the baking evaluation because of poor kernel characteristics or rheological dough properties.

Data from the northeastern area were from five stations -- Prosper, Langdon, Minot, and Carrington, North Dakota, and Crookston, Minnesota. Quality data of the spring wheat cultivars and experimental lines is shown in Tables 1-5. Statistical data is shown on Tables 6-16.

Data from the southeastern area were from six stations -- Brookings, Redfield, and Selby, South Dakota, Morris and St. Paul, Minnesota, and Madison, Wisconsin. Quality data of the spring wheat cultivars and experimental lines is shown in Tables 17-22. Statistical data is shown on Tables 23-33.

Data from the midwestern area were from four stations -- Williston and Dickinson, North Dakota, Powell, Wyoming, and Sidney, Montana. Quality data of spring wheat cultivars and experimental lines is shown in Tables 34-37. Statistical data is shown on Tables 38-48.

Data from the western area are from four stations -- Havre and Bozeman, Montana, Aberdeen, Idaho, and Pullman, Washington. Quality data of spring wheat cultivars and experimental lines is shown in Tables 49-52. Statistical data is shown on Tables 53-63.

FIELD PLOT NURSERY SAMPLES - 1991 CROP

Sixty-nine samples were received from three states at four stations. Quality data for the individual samples is shown in Tables 64-67.

Casselton, Langdon and Minot - North Dakota

Three commercial cultivars were received from Langdon, four from Casselton, and five from Minot. Data for these selections is shown in Tables 64-66. Len was used as the standard for comparison.

Ithaca - New York

Twenty selections were received from this station. Data for these samples is shown in Table 67. Stoa was used as the standard for comparison.

Imperial Valley - California

Thirty-seven selections were received from this station. Data for these samples is shown in Table 68. Yecora Rojo was used as the standard for comparison.

EXPLANATION OF ABBREVIATIONS LISTED UNDER THE HEADINGS AND THOSE THAT MAY BE LISTED UNDER MINOR AND MAJOR DEFICIENCIES ON COMPUTER PRINTOUT

TW = Test Weight
KW = 1,000 Kernel Weight
LG = Large Kernels
SM = Small Kernels

WHT ASH = Wheat Ash
WP; WHT PRO = Wheat Protein
EX = Flour Extraction
A65 = Ash at 65% Flour Extraction

FP; FLR PRO = Flour Protein
MC; MILL CHAR = Milling Characteristics
MIX ABS = Mixograph Absorption

MX: MIX PAT = Mixograph Pattern Score
BA; BAKE ABS = Actual Bake Absorption
MT: MIX TIME = Actual Dough Mixing Requirements

DC; DOUGH CHAR = Dough Handling Characteristics
CC; CRUMB COLOR = Standard 80
CG; CRUMB GRAIN = Standard 85
LV; LOAF VOL = Loaf Volume

FOOTNOTES FOR TABLES

These footnotes are applicable for specified column headings in all tables that follow

Column Heading	Footnote
WHT ASH, WHT PRO, ASH @ 65%, FLR PRO, BAKE ABS (100 G loaf)	14% Moisture basis.
MILL CHAR	5 = Normal. 4 = Normal-soft. 3 = Soft-normal. 2 = Soft. 1 = Gritty. 0 = Very soft.
MIX PAT	Refer to reference mixograms for numerical curve pattern. (1 = Very weak - - - 11 = Very strong.)
DOUGH CHAR	9 = Elastic. 7 = Slightly pliable. 5 = Very pliable. 4 = Bucky. 2 = Very, very pliable. 0 = Dead.
CRUMB COLOR	100 = Soft, white 80 = Soft, slightly creamy 60 = Creamy 40 = Very creamy 20 = Dull, very gray
CRUMB GRAIN	100 = Close, elongated, and uniform cells; fine grain and thin walls; soft texture. 80 = Slightly open, elongated cells; fine grain and thin walls; soft texture. 60 = Open elongated to round cells; fine grain and thick walls; slightly coarse texture. 40 = Open round cells; coarse grain and thick walls; coarse to rough texture. 20 = Irregular open and large cells, coarse grain and thick walls; rough or soggy texture.

STANDARD MIXOGRAM PATTERNS

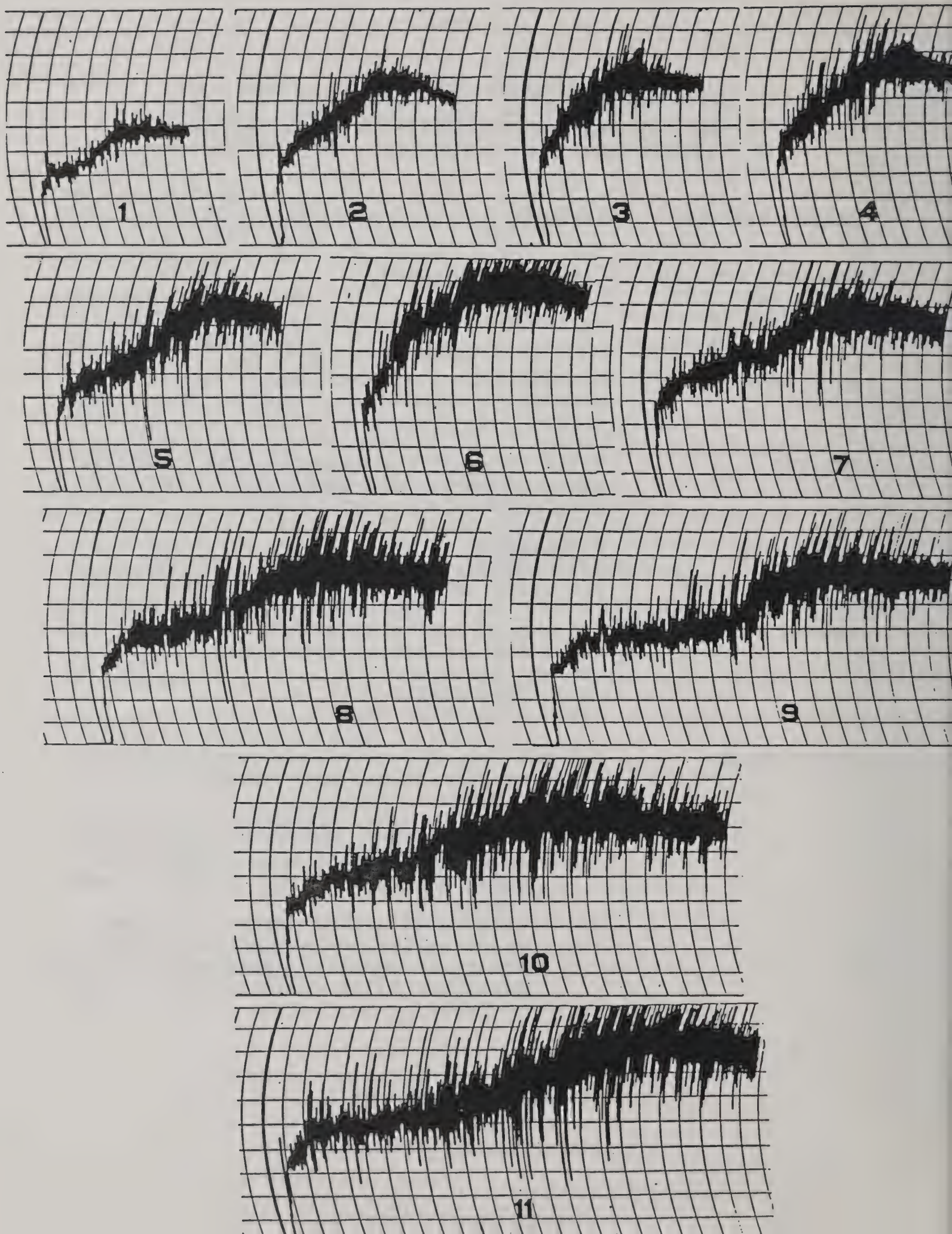


TABLE 1

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=NORTH DAKOTA STATION=PROSPER NURSERY=UNIFORM

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
BUTTE 86	S	60.6	29.6	44	1	1.81	14.3	88	4	62.3	0.44	14.1	5	4	60.3	2
CHRIS		58.7	21.9	18	12	1.90	15.4	61	4	55.5	0.54	14.6	5	3	58.2	3
ERA	S	52.5	18.5	6	24	2.31	15.1	61	1	53.1	0.70	14.4	4	1	57.6	3
MARQUIS		56.5	21.2	8	13	1.90	12.8	65	1	55.7	0.57	12.6	5	2	55.3	1
STOA	S	58.6	24.8	18	6	1.81	14.9	65	4	60.2	0.47	14.3	5	4	59.6	4
SD 3055		61.5	29.4	50	1	1.82	15.4	54	4	61.5	0.43	15.2	5	4	58.6	3
SD 3056		61.4	31.1	50	0	1.76	15.0	80	4	60.7	0.50	14.4	5	4	60.0	3
SD 3080		63.8	29.6	46	1	1.74	15.4	71	4	60.4	0.40	14.6	5	4	60.5	3
SD 8072		60.0	27.3	31	2	1.97	15.2	75	4	60.0	0.56	14.8	5	4	58.2	3
SD 8073		60.3	30.1	40	1	1.87	14.8	79	4	63.5	0.52	14.2	5	4	61.1	4
SD 8074		62.6	30.3	45	1	1.72	14.2	73	4	63.0	0.47	13.5	5	4	62.1	5
MN 87150		60.0	28.7	25	4	1.73	13.9	51	3	59.7	0.49	13.2	5	4	57.3	1
MN 88170		59.7	30.7	48	2	1.79	13.8	62	3	66.0	0.48	12.5	5	3	57.9	1
MN 88189		61.9	35.8	61	0	1.71	13.8	61	3	66.8	0.40	13.8	5	4	58.2	3
MN 88320		63.4	31.1	49	0	1.79	13.7	72	3	63.4	0.48	13.1	5	4	60.0	3
MN 88334		61.4	25.8	26	7	1.68	14.7	59	4	64.0	0.43	13.7	5	4	57.6	2
ND 655		62.2	31.0	46	3	1.68	15.5	76	4	66.5	0.40	15.2	5	4	60.8	3
ND 657		61.3	32.7	51	0	1.80	16.4	72	4	63.5	0.47	16.1	5	4	61.1	4
ND 662		62.2	34.6	54	0	1.66	15.4	70	4	66.0	0.41	15.1	5	4	60.3	7
ND 671		63.1	30.8	56	0	1.66	15.6	69	4	63.0	0.40	15.5	5	4	62.5	3
ND 672		62.3	30.5	43	1	1.74	14.5	81	4	63.0	0.48	13.2	5	4	59.0	3
XW 398A4		59.4	31.4	35	2	1.96	14.4	57	4	60.4	0.57	14.1	5	4	60.3	3
N86-0542		58.6	26.6	25	4	1.90	13.9	59	3	62.4	0.52	13.3	5	4	59.0	3
N87-0306		60.7	31.5	41	1	1.83	15.0	70	4	65.1	0.41	14.5	5	4	60.8	3
N88-3136		62.5	29.9	50	0	1.82	14.4	54	4	65.1	0.44	14.2	5	4	59.6	3
N88-3034		58.6	28.3	30	2	1.97	16.3	62	4	63.1	0.49	16.0	5	4	60.3	3
N87-467		57.8	29.0	26	3	1.90	14.0	45	4	61.5	0.52	13.5	5	4	57.9	2
FA 987-350		58.6	32.3	44	1	1.89	15.0	55	4	58.2	0.50	14.8	5	4	58.6	2
CI 982-309		48.7	20.2	7	18	2.41	15.0	52	2	51.2	0.69	15.1	5	1	59.6	4
AC MINTO		58.6	30.0	46	1	1.90	16.0	73	4	60.0	0.54	15.6	5	4	58.2	3
BW 148		60.3	30.8	46	2	1.88	16.4	78	4	62.6	0.49	16.3	5	4	59.6	3
ID 0367		56.2	23.6	8	10	2.10	14.0	55	3	55.4	0.59	13.4	5	3	56.5	3

TABLE 1 (CONT)

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=NORTH DAKOTA STATION=PROSPER NURSERY=UNIFORM

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
BUTTE 86	S	60.3	3.50	9	85	85	183	2	3.3									MI	MJ					
CHRIS		58.2	3.50	9	80	80	189	2	3.0		MI	MI		MI					MJ					MI
ERA	S	57.6	5.00	9	80	85	209	2	1.3	MJ	MJ	MJ		MJ	MJ				MJ					
MARQUIS		55.3	3.50	5	80	80	183	1	1.3	MJ	MI	MI	MJ	MI	MI	MI		MJ	MJ		MI			MI
STOA	S	59.6	5.00	9	80	80	197	2	3.3										MJ					MI
SD 3055		58.6	4.25	9	80	80	217	2	3.3										MJ					MI
SD 3056		60.0	3.75	9	80	80	204	2	3.3										MJ					MI
SD 3080		60.5	4.00	9	80	80	208	3	3.7										MI					MI
SD 8072		58.2	4.25	9	75	80	190	2	3.3										MJ				MI	MI
SD 8073		61.1	4.00	9	80	75	186	3	3.7										MI					MI
SD 8074		62.1	5.00	9	80	85	183	4	4.0															
MN 87150		57.3	3.25	7	80	80	191	1	2.7				MI					MJ	MJ					MI
MN 88170		57.9	2.25	5	80	85	179	1	2.3				MI			MI		MJ	MJ	MI	MI			
MN 88189		58.2	4.50	9	80	80	204	2	3.0				MI						MJ					MI
MN 88320		60.0	3.50	9	80	80	187	2	3.0				MI						MJ					MI
MN 88334		57.6	4.25	7	80	85	185	2	3.3									MI	MJ					
ND 655		60.8	3.75	9	80	80	198	3	3.7										MI					MI
ND 657		61.1	3.75	9	80	85	210	3	3.7										MI					
ND 662		60.3	6.25	9	80	85	185	1	3.0									MI	MJ	MI				
ND 671		62.5	3.50	9	85	75	210	4	4.0															MI
ND 672		59.0	5.00	7	80	90	190	2	3.3										MJ					
XW 398A4		60.3	5.50	9	80	80	197	2	3.3						MI				MJ					MI
N86-0542		59.0	6.50	9	80	85	195	1	2.7				MI						MJ	MI				
N87-0306		60.8	3.50	9	80	85	202	3	3.7										MI					
N88-3136		59.6	3.75	7	85	75	220	2	3.3										MJ					MI
N88-3034		60.3	3.50	9	80	80	207	2	3.3										MJ					MI
N87-467		57.9	5.25	7	80	85	202	2	3.3	MI								MI	MJ					
FA 987-350		58.6	5.25	7	85	70	203	2	3.3									MI	MJ					MI
CI 982-309		59.6	6.00	7	80	85	196	1	1.3	MJ	MI	MJ		MJ	MJ				MJ	MI				
AC MINTO		58.2	3.50	7	80	80	197	2	3.3										MJ					MI
BW 148		59.6	3.25	7	80	80	187	2	3.3										MJ					MI
ID 0367		56.5	6.00	7	80	85	194	1	2.3	MJ		MI		MI	MI				MJ	MI				

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	22.2	8	13.9	56.4	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	75	80	175
MAJOR FAULTING VALUES	56.9	19.2	18	12.9	54.4	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	50	50	165

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

TABLE 2

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=NORTH DAKOTA STATION=LANGDON NURSERY=UNIFORM

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
BUTTE86	S	58.9	33.2	54	2	1.60	15.5	75	4	64.4	0.44	14.6	5	4	60.0	2
CHRIS		55.3	23.9	21	2	1.56	16.0	66	3	60.8	0.48	15.8	5	3	61.1	2
ERA	S	54.2	22.5	13	8	1.88	14.5	74	2	61.3	0.57	13.7	5	4	59.0	3
MARQUIS		55.5	23.6	22	0	1.90	15.8	60	3	56.9	0.57	15.3	5	2	57.9	3
STOA	S	57.2	27.9	30	2	1.82	15.7	63	4	63.2	0.47	15.7	5	4	63.1	5
MN87150		56.5	29.5	27	1	1.57	13.8	59	2	63.6	0.50	12.7	5	3	55.8	1
MN88170		55.2	29.8	36	2	1.65	14.7	65	3	62.8	0.47	13.5	5	4	60.0	1
MN88189		55.8	30.4	42	2	1.69	14.7	60	3	64.9	0.48	14.0	5	4	58.2	2
MN88320		58.9	29.2	47	1	1.60	13.9	71	3	63.5	0.49	12.5	5	3	57.9	2
MN88334		57.1	24.0	16	6	1.65	14.4	60	4	61.1	0.43	13.5	5	4	56.5	1
N86-0542		55.0	26.3	25	6	1.76	14.2	68	3	62.3	0.53	13.1	5	4	59.3	3
N87-0306		54.4	24.9	19	5	1.78	15.6	64	3	61.4	0.53	14.9	5	4	60.8	4
N87-467		54.9	26.0	24	5	1.78	14.0	51	3	64.1	0.57	13.0	5	4	59.0	3
N88-3034		56.6	28.2	36	1	1.71	16.1	65	3	64.1	0.47	16.1	5	4	61.8	3
N88-3136		59.1	31.5	59	0	1.62	15.1	68	4	62.3	0.47	14.4	5	4	59.6	3
ND655		59.2	27.9	46	1	1.76	15.9	77	4	62.8	0.46	15.5	5	4	61.1	4
ND657		56.2	26.7	23	2	1.81	16.2	70	3	63.3	0.50	15.5	5	4	62.1	5
ND662		56.8	29.0	35	2	1.74	15.8	63	3	62.3	0.48	15.1	5	4	58.6	5
ND671		61.4	31.2	50	0	1.61	15.1	73	4	66.0	0.39	14.8	5	4	62.5	4
ND672		59.4	27.2	45	0	1.69	16.2	86	4	62.1	0.53	15.4	5	4	60.8	7
SD3055		58.8	32.9	58	0	1.66	15.8	62	4	62.5	0.44	15.4	5	4	61.1	3
SD3056		58.9	32.4	60	0	1.68	15.8	85	4	61.9	0.49	14.9	5	4	60.5	3
SD8072		58.5	33.7	63	0	1.74	16.0	80	4	61.4	0.47	15.2	5	4	61.1	3
SD8073		57.0	32.1	58	0	1.75	15.2	70	4	60.5	0.52	14.6	5	3	60.8	4
SD8074		57.7	30.2	50	0	1.73	14.6	79	4	59.2	0.48	14.4	5	3	58.2	5
SD3080		61.4	35.6	64	0	1.50	16.0	70	4	62.6	0.40	15.6	5	4	60.8	4
AC-MINTO		56.5	29.2	56	0	1.80	16.6	77	3	60.8	0.54	16.2	5	3	60.5	3
BW148		59.2	32.3	51	0	1.80	16.7	83	4	63.3	0.44	16.4	5	4	61.1	3
CI982-309		53.0	26.0	28	4	1.85	14.9	60	3	52.7	0.52	14.3	4	2	57.6	4
FA987-350		55.5	27.8	26	5	1.80	15.3	55	3	58.1	0.55	14.7	5	2	58.2	3
ID0367		54.0	23.0	12	3	1.83	14.8	57	3	55.3	0.55	14.4	5	2	57.3	3
XW398A4		58.7	29.1	39	1	1.91	14.2	71	4	60.0	0.55	14.4	5	3	60.0	3

TABLE 2 (CONT)

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=NORTH DAKOTA STATION=LANGDON NURSERY=UNIFORM

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
BUTTE86	S	60.0	3.25	7	80	80	200	2	3.3									MI	MJ				MI	
CHRIS		61.1	2.50	7	80	85	187	2	2.7	MJ	MI			MI				MI	MI	MI				
ERA	S	59.0	4.25	7	85	85	191	2	2.7	MJ	MJ	MI			MI				MJ					
MARQUIS		57.9	3.50	7	80	85	197	2	2.3	MJ	MI			MJ	MI				MJ					
STOA	S	63.1	4.00	9	85	75	209	4	4.0	MI													MI	
MN87150		55.8	3.50	2	85	80	187	1	2.0	MJ			MI			MI		MJ	MJ		MJ		MI	
MN88170		60.0	2.00	2	80	85	171	1	2.7	MJ								MJ	MJ	MI	MJ			MI
MN88189		58.2	4.25	9	80	85	202	2	3.0	MJ								MI	MJ					
MN88320		57.9	4.25	7	80	85	192	2	2.7				MI			MI		MI	MJ					
MN88334		56.5	4.00	5	85	80	181	1	3.0	MI	MI							MJ	MJ		MI		MI	
N86-0542		59.3	4.25	9	75	85	203	2	3.0	MJ									MJ			MI		
N87-0306		60.8	4.75	9	80	80	217	3	3.3	MJ	MI								MI				MI	
N87-467		59.0	5.50	7	80	75	210	2	3.0	MJ					MI				MJ				MI	
N88-3034		61.8	3.25	9	80	75	226	3	3.3	MJ									MI				MI	
N88-3136		59.6	4.25	9	80	80	208	2	3.3										MJ				MI	
ND655		61.1	4.25	9	80	80	201	3	3.7										MI				MI	
ND657		62.1	5.00	9	80	85	220	4	3.7	MJ														
ND662		58.6	7.00	4	85	75	192	1	2.7	MJ									MJ	MI	MJ		MI	
ND671		62.5	2.75	7	85	85	200	3	3.7											MI				
ND672		60.8	4.50	9	85	85	212	3	3.7									MI	MI					
SD3055		61.1	3.50	9	80	85	218	3	3.7										MI					
SD3056		60.5	3.50	9	85	80	207	3	3.7										MI				MI	
SD8072		61.1	3.50	9	80	75	208	3	3.7										MI				MI	
SD8073		60.8	4.25	7	80	85	199	3	3.3	MI				MI					MI					
SD8074		58.2	7.00	7	80	80	197	1	2.7	MI				MI					MJ	MI			MI	
SD3080		60.8	4.25	9	80	90	222	3	3.7										MI					
AC-MINTO		60.5	2.50	7	90	85	212	2	2.7	MJ				MI					MI	MI				
BW148		61.1	3.25	5	80	90	215	3	3.7										MI		MI			
CI982-309		57.6	5.75	5	85	90	194	1	2.0	MJ				MJ					MJ	MI	MI			
FA987-350		58.2	6.00	7	85	90	211	1	2.0	MJ				MJ					MJ	MI				
ID0367		57.3	6.00	7	80	85	206	1	2.0	MJ	MI			MJ					MJ	MI				
XW398A4		60.0	5.75	9	80	75	220	1	2.7					MI					MJ	MI			MI	

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	25.8	8	13.9	60.9	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	75	80	179
MAJOR FAULTING VALUES	56.9	22.8	18	12.9	58.9	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	50	50	169

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

TABLE 3

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=NORTH DAKOTA STATION=MINOT NURSERY=UNIFORM

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
BUTTE 86	S	63.1	36.1	65	0	1.58	16.1	71	4	65.7	0.42	15.1	5	4	61.4	3
CHRIS		56.5	24.2	20	4	1.69	16.4	64	2	65.2	0.49	16.3	5	4	60.0	3
ERA	S	58.4	25.3	22	7	1.68	14.4	60	3	68.0	0.50	13.2	5	4	56.2	2
MARQUIS		60.2	23.5	17	6	1.83	15.4	57	3	63.8	0.51	14.6	5	3	55.3	2
STOA	S	61.4	32.6	44	0	1.52	15.2	64	4	67.5	0.39	14.8	5	4	59.3	4
SD3055		62.0	36.9	74	0	1.48	16.2	59	4	66.4	0.40	15.9	5	4	60.0	3
SD3056		62.0	37.0	76	0	1.50	15.8	67	4	65.7	0.48	14.8	5	4	59.6	2
SD3080		63.9	35.5	60	0	1.48	16.4	67	4	64.5	0.41	15.7	5	3	60.0	3
SD8072		63.1	36.6	73	0	1.45	15.6	76	4	66.2	0.43	14.6	5	4	59.0	2
SD8073		62.2	36.4	71	0	1.47	15.1	75	4	66.0	0.41	14.2	5	4	60.0	2
SD8074		63.2	32.9	57	0	1.51	15.8	70	4	65.3	0.42	14.8	5	4	58.2	3
MN87150		61.0	32.5	57	0	1.48	14.2	48	4	64.9	0.38	12.9	5	2	53.5	1
MN88170		59.1	31.0	41	1	1.51	14.3	49	4	67.6	0.38	13.0	5	4	56.9	1
MN88189		61.7	37.7	70	0	1.51	15.1	53	4	67.0	0.36	14.3	5	4	55.5	2
MN88320		62.2	32.7	61	0	1.49	13.8	54	3	68.6	0.40	12.3	5	2	58.6	2
MN88334		63.2	27.7	33	3	1.47	14.8	55	4	67.1	0.37	13.8	5	4	57.3	2
ND655		63.8	31.4	58	0	1.51	15.8	59	4	66.4	0.41	15.2	5	4	59.6	2
ND657		61.2	32.3	50	0	1.55	16.0	66	4	65.0	0.44	15.1	5	4	60.5	3
ND662		61.3	32.6	55	0	1.56	15.7	58	4	64.2	0.43	14.7	5	3	56.9	3
ND671		63.5	31.9	60	0	1.55	16.5	65	4	63.7	0.38	16.4	5	3	61.4	3
ND672		62.2	29.6	53	1	1.59	15.7	71	4	64.9	0.42	14.6	5	3	58.6	4
XW398A4		62.4	34.6	60	0	1.61	14.9	46	4	67.3	0.41	14.6	5	4	58.6	3
N86-0542		60.3	30.2	42	2	1.58	14.1	56	4	65.4	0.44	13.1	5	4	55.3	2
N87-0306		61.8	34.5	61	1	1.54	15.1	50	4	65.7	0.39	14.4	5	4	57.9	3
N88-3136		63.6	32.9	60	0	1.52	15.2	50	4	64.8	0.38	14.5	5	3	58.2	2
N88-3034		60.1	29.1	34	0	1.67	16.1	52	4	66.0	0.40	16.0	5	4	59.0	2
N87-467		62.2	34.5	54	0	1.49	14.2	40	4	65.4	0.40	13.2	5	4	57.3	2
FA987-350		60.1	35.5	60	0	1.56	15.1	40	4	63.6	0.39	14.3	5	3	57.6	2
CI982-309		54.3	25.8	24	3	1.79	15.4	51	2	62.0	0.51	15.2	5	2	59.6	4
AC MINTO		59.7	28.2	34	2	1.68	16.4	67	4	61.9	0.44	16.3	5	2	57.9	2
BW148		61.9	31.2	47	0	1.75	16.9	64	4	63.9	0.47	16.7	5	3	58.6	2
ID0367		56.0	23.8	8	8	1.78	14.7	38	2	62.1	0.43	14.3	5	2	55.3	2

TABLE 3 (CONT)

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=NORTH DAKOTA STATION=MINOT NURSERY=UNIFORM

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
BUTTE 86	S	61.4	3.00	9	85	80	195	3	3.7										MI				MI	
CHRIS		60.0	3.25	7	85	85	202	2	2.7	MJ	MJ								MJ					
ERA	S	56.2	5.00	7	80	85	200	2	3.0		MJ							MI	MJ					
MARQUIS		55.3	4.00	7	80	85	185	2	2.7		MJ			MI				MI	MJ					
STOA	S	59.3	4.50	9	80	80	205	2	3.3										MJ				MI	
SD3055		60.0	3.50	9	80	80	220	2	3.3										MJ				MI	
SD3056		59.6	3.00	7	85	90	203	2	3.3									MI	MJ					
SD3080		60.0	3.50	9	80	85	216	2	3.0					MI					MJ					
SD8072		59.0	3.25	7	85	85	209	2	3.3									MI	MJ					
SD8073		60.0	3.50	9	80	85	196	2	3.3									MI	MJ					
SD8074		58.2	5.25	9	85	75	188	2	3.3										MJ				MI	
MN87150		53.5	3.00	7	90	90	170	1	2.3					MI		MI		MJ	MJ					MI
MN88170		56.9	1.75	5	85	85	172	1	3.0									MJ	MJ	MJ	MI			MI
MN88189		55.5	4.25	7	90	85	187	2	3.3									MI	MJ					
MN88320		58.6	3.00	7	80	90	183	2	2.3				MI			MJ		MI	MJ					
MN88334		57.3	3.00	7	80	85	172	1	3.0		MI							MI	MJ					MI
ND655		59.6	4.00	9	85	80	192	2	3.3									MI	MJ				MI	
ND657		60.5	4.25	9	80	80	217	3	3.7										MI				MI	
ND662		56.9	7.00	7	80	80	180	1	2.7					MI					MJ	MI			MI	
ND671		61.4	3.50	9	85	80	214	3	3.3					MI					MI				MI	
ND672		58.6	5.25	9	90	85	189	2	3.0					MI					MJ					
XW398A4		58.6	6.00	7	85	80	196	1	3.0										MJ	MI			MI	
N86-0542		55.3	5.50	7	85	85	183	2	3.3									MI	MJ					
N87-0306		57.9	4.00	9	85	85	195	2	3.3										MJ					
N88-3136		58.2	4.25	9	80	90	213	2	3.0					MI				MI	MJ					
N88-3034		59.0	3.25	9	80	85	205	2	3.3		MI							MI	MJ					
N87-467		57.3	4.75	7	80	80	194	2	3.3									MI	MJ				MI	
FA987-350		57.6	4.00	7	85	70	185	2	3.0					MI				MI	MJ				MI	
CI982-309		59.6	5.75	9	85	80	217	1	1.7	MJ	MJ			MJ					MJ	MI			MI	
AC MINTO		57.9	3.25	9	85	85	203	2	2.7		MI			MJ				MI	MJ					
BW148		58.6	2.75	9	85	85	197	1	2.7					MI				MI	MJ	MI				
ID0367		55.3	5.50	9	80	70	196	2	2.0	MJ	MJ	MI		MJ				MI	MJ				MI	

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	29.2	8	13.9	65.0	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	75	80	179
MAJOR FAULTING VALUES	56.9	26.2	18	12.9	63.0	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	50	50	169

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

TABLE 4

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=NORTH DAKOTA STATION=CARRINGTON NURSERY=UNIFORM

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
BUTTE 86	S	58.1	28.5	36	7	1.76	15.0	70	4	64.2	0.45	14.5	5	4	61.1	4
CHRIS		49.8	18.0	11	25	2.14	15.3	59	1	56.1	0.67	15.4	5	1	60.3	3
ERA	S	47.5	19.5	12	20	2.34	14.8	55	1	59.3	0.86	14.6	5	2	60.0	3
MARQUIS		49.3	17.7	6	29	2.30	15.4	67	1	49.1	0.74	15.4	5	1	60.0	3
STOA	S	56.7	27.2	26	9	1.83	14.7	61	3	64.5	0.46	14.9	5	4	62.5	4
SD3055		57.9	26.7	35	9	1.87	14.9	49	4	60.4	0.47	14.8	5	3	60.5	4
SD3056		58.1	28.4	40	6	1.80	14.8	67	4	62.0	0.51	14.8	5	4	61.8	4
SD3080		59.0	27.2	31	10	1.76	15.3	58	4	58.2	0.47	15.4	5	2	60.5	7
SD8072		59.4	30.4	42	7	1.88	14.7	62	4	58.4	0.53	14.5	5	2	61.1	3
SD8073		57.5	28.4	38	6	1.89	14.4	68	4	56.9	0.57	14.2	5	2	61.4	4
SD8074		59.7	29.3	47	4	1.74	14.3	61	4	62.3	0.44	13.8	5	4	60.3	5
MN87150		52.9	22.8	12	16	1.95	13.9	44	1	55.9	0.57	13.7	5	2	59.3	2
MN88170		52.8	26.9	32	8	1.94	13.9	49	2	64.7	0.49	13.2	5	4	60.8	2
MN88189		54.9	27.5	33	6	1.88	14.2	48	3	64.3	0.45	13.6	5	4	61.1	3
MN88320		57.4	24.9	27	10	1.84	13.4	57	3	59.8	0.48	12.5	5	2	60.0	3
MN88334		53.7	21.2	13	19	1.91	14.3	48	2	52.5	0.51	13.5	5	2	56.2	2
ND655		57.6	25.8	29	9	1.81	14.8	56	4	61.4	0.46	14.9	5	4	60.5	3
ND657		55.0	26.0	28	9	1.97	15.6	61	3	60.2	0.49	15.8	5	3	62.1	5
ND662		54.0	24.0	18	15	2.04	14.8	57	3	63.5	0.57	14.7	5	4	61.4	5
ND671		60.5	27.0	32	6	1.77	15.4	64	4	63.0	0.38	14.8	5	4	61.8	5
ND672		55.8	23.0	15	12	2.02	15.1	71	3	57.7	0.55	14.8	5	2	60.8	5
XW398A4		54.4	25.1	26	11	2.07	14.3	49	3	59.3	0.62	13.8	5	2	61.4	5
N86-0542		51.3	22.4	11	18	2.18	13.9	51	1	58.4	0.66	13.6	5	1	60.8	4
N87-0306		54.8	24.7	22	10	1.94	14.7	50	3	61.0	0.51	14.2	5	4	57.6	3
N88-3136		57.2	28.2	40	7	1.88	15.3	48	4	64.5	0.48	15.1	5	4	61.8	5
N88-3034		50.2	23.9	25	8	2.30	16.4	55	3	62.0	0.63	16.5	5	3	63.7	4
N87-467		52.2	23.1	11	17	2.08	14.0	37	2	59.5	0.64	13.8	5	2	59.6	3
FA987-350		52.2	23.9	15	15	2.05	14.6	40	3	59.5	0.57	14.4	5	3	58.6	2
CI982-309		47.8	21.0	14	17	2.18	14.4	49	2	56.6	0.72	14.7	5	1	61.4	4
AC-MINTO		49.0	20.7	22	11	2.25	16.5	60	3	56.0	0.71	16.2	5	1	61.4	3
BW-148		57.2	25.4	33	8	1.91	16.5	70	4	63.4	0.50	16.5	5	4	60.8	4
ID0367		50.5	21.3	9	13	2.08	14.0	45	3	58.7	0.58	13.6	5	3	57.9	3

TABLE 4 (CONT)

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=NORTH DAKOTA STATION=CARRINGTON NURSERY=UNIFORM

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
BUTTE 86	S	61.1	3.50	7	85	85	178	3	3.7										MI					
CHRIS		60.3	2.75	7	80	85	178	1	1.0	MJ	MJ	MJ		MJ	MJ				MJ	MI				
ERA	S	60.0	4.25	7	80	85	190	2	1.7	MJ	MJ	MJ		MI	MJ				MJ					
MARQUIS		60.0	2.75	5	80	85	180	1	1.0	MJ	MJ	MJ		MJ	MJ				MJ	MI	MI			
STOA	S	62.5	3.75	7	80	85	188	4	3.7	MJ		MI												
SD3055		60.5	3.75	9	80	80	193	3	3.3	MI		MI		MI					MI				MI	
SD3056		61.8	3.75	9	80	85	190	3	3.7										MI					
SD3080		60.5	5.25	9	80	75	195	3	3.0			MI		MJ				MI	MI				MI	
SD8072		61.1	4.25	9	80	85	190	3	3.0					MJ					MI					
SD8073		61.4	4.75	7	80	80	180	3	3.0	MI				MJ	MI				MI				MI	
SD8074		60.3	5.00	7	80	85	172	2	3.3										MJ					
MN87150		61.0	2.50	7	80	80	183	2	1.7	MJ	MI	MJ	MI	MJ	MI			MI	MI	MI			MI	
MN88170		60.8	1.75	2	80	85	175	1	2.3	MJ		MI	MI					MI	MI	MJ	MJ			
MN88189		61.1	3.50	9	85	85	202	3	3.3	MJ									MI					
MN88320		60.0	4.00	7	80	85	182	2	2.3	MI		MI	MI	MI		MI			MJ					
MN88334		56.2	3.00	5	80	85	178	2	2.0	MJ	MI	MJ		MJ				MI	MJ		MI			
ND655		60.5	4.00	7	85	85	195	3	3.7	MI		MI							MI					
ND657		62.1	4.25	9	80	85	202	4	3.3	MJ		MI		MI										
ND662		61.4	5.50	7	80	85	193	3	3.3	MJ		MI			MI				MI					
ND671		61.8	3.50	9	85	85	188	3	3.7										MI					
ND672		60.8	4.75	7	85	85	194	3	2.7	MJ		MI		MJ					MI					
XW398A4		61.4	5.00	9	85	80	212	3	2.7	MJ		MI		MI	MJ				MI				MI	
N86-0542		60.8	5.00	7	80	85	198	3	1.7	MJ	MI	MJ	MI	MJ	MJ				MI					
N87-0306		57.6	5.00	7	80	85	201	2	3.0	MJ		MI							MJ					
N88-3136		61.8	3.50	9	80	85	210	3	3.7	MI									MI					
N88-3034		63.7	2.75	9	80	85	215	3	3.0	MJ		MI			MJ					MI				
N87-467		59.6	3.75	5	80	80	196	2	2.0	MJ		MJ		MI	MJ				MJ		MI		MI	
FA987-350		58.6	4.00	5	80	90	190	2	2.7	MJ		MI		MI	MI			MI	MJ		MI			
CI982-309		61.4	4.50	5	80	90	197	3	2.0	MJ	MI	MJ		MJ	MJ				MI		MI			
AC-MINTO		61.4	2.50	5	80	85	190	2	2.0	MJ	MI	MI		MJ	MJ				MI	MI	MI			
BW-148		60.8	2.75	5	80	85	182	2	3.3	MI		MI							MI	MI	MI			
ID0367		57.9	5.50	7	80	85	197	2	2.7	MJ	MI	MI		MI	MI				MJ					

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	23.0	8	13.9	60.6	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	75	80	164
MAJOR FAULTING VALUES	56.9	20.0	18	12.9	58.6	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	50	50	154

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

TABLE 5

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=MINNESOTA STATION=CROOKSTON NURSERY=UNIFORM

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
BUTTE 86	S	57.6	26.9	31	4	1.96	15.8	77	4	59.1	0.44	14.6	5	4	62.1	3
CHRIS		57.2	23.3	20	7	1.84	15.3	70	4	52.9	0.47	14.2	5	3	59.3	4
ERA	S	52.4	20.0	12	14	2.18	15.3	60	3	57.2	0.65	14.4	5	3	60.3	4
MARQUIS		54.9	21.6	12	9	2.07	13.8	52	2	51.6	0.63	12.9	5	1	56.2	3
STOA	S	55.4	24.2	16	8	1.99	15.1	68	3	51.7	0.57	14.5	5	2	60.8	5
SD3055		58.2	27.7	41	1	1.88	15.8	59	4	55.7	0.47	15.3	5	4	61.8	4
SD3056		57.5	27.6	34	3	1.92	15.7	76	4	55.7	0.60	14.5	5	4	61.4	4
SD3080		57.4	23.8	20	10	1.92	15.7	70	4	56.0	0.51	15.0	5	4	60.8	4
SD8072		54.6	22.4	16	8	2.10	15.7	69	3	56.3	0.63	14.8	5	3	61.4	4
SD8073		55.0	22.6	22	6	2.09	15.0	65	3	55.7	0.62	14.2	5	3	62.1	5
SD8074		56.9	25.5	27	5	1.92	15.2	72	3	49.1	0.57	13.6	5	2	57.9	4
MN87150		51.8	20.6	6	15	2.07	14.8	57	3	45.7	0.59	14.1	5	2	57.9	2
MN88170		51.5	23.5	13	11	2.06	14.7	64	3	58.1	0.58	13.5	5	4	59.0	2
MN88189		54.2	27.5	24	3	1.96	15.1	52	3	56.4	0.55	14.4	5	4	60.0	4
MN88320		56.9	24.2	19	8	1.92	14.4	64	3	58.3	0.51	13.3	5	4	59.6	3
MN88334		59.1	24.3	17	7	1.70	14.5	63	4	65.1	0.41	13.6	5	4	57.6	2
ND655		58.5	23.7	20	7	1.94	15.7	66	4	64.1	0.52	15.4	5	4	62.5	4
ND657		55.7	25.8	17	4	2.06	15.7	71	3	61.1	0.58	15.0	5	4	61.4	4
ND662		59.1	29.7	39	2	1.81	15.1	64	4	64.0	0.50	14.2	5	4	61.4	6
ND671		57.6	24.4	24	5	2.18	15.6	60	4	56.4	0.58	15.2	5	4	64.4	5
ND672		58.8	25.2	23	5	1.86	14.8	76	4	58.8	0.56	13.1	5	4	60.5	4
XW398A4		54.2	24.2	11	8	2.16	15.3	46	3	57.1	0.68	14.5	5	3	63.1	5
N86-0542		54.2	23.6	17	10	1.96	14.4	55	3	57.3	0.63	13.6	5	3	60.0	4
N87-0306		54.2	23.0	9	10	2.15	15.9	58	3	60.0	0.56	15.2	5	4	65.1	6
N88-3136		57.8	26.1	26	2	1.95	15.2	50	4	58.4	0.50	15.1	5	4	60.3	4
N88-3034		55.0	24.4	16	4	2.11	16.2	63	3	60.0	0.51	16.0	5	4	57.3	4
N87-467		53.2	23.8	7	12	2.18	14.9	40	3	54.7	0.61	13.9	5	3	60.0	5
FA87-350		54.3	25.6	23	10	2.23	15.7	58	3	56.3	0.55	15.1	5	4	60.0	4
CI982-309		54.5	24.6	18	7	1.90	15.3	54	3	51.2	0.57	14.5	5	2	59.0	4
AC-MINTO		56.2	28.5	39	1	1.87	15.3	64	3	60.0	0.52	14.4	5	4	60.0	3
BW148		58.9	27.5	33	2	1.93	15.9	77	4	57.3	0.57	14.8	5	4	61.4	3
ID0367		54.0	24.0	10	7	2.03	14.3	54	3	54.9	0.59	13.6	5	4	58.6	4

TABLE 5 (CONT)

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=MINNESOTA STATION=CROOKSTON NURSERY=UNIFORM

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
BUTTE 86	S	62.1	3.00	9	75	85	215	4	4.0	MI												MI		
CHRIS		61.3	3.50	9	75	85	207	3	3.3	MI				MI					MI			MI		
ERA	S	60.3	5.00	9	75	85	229	2	2.7	MJ	MI	MI			MJ				MJ			MI		
MARQUIS		56.2	4.75	9	80	85	202	2	1.7	MJ	MI	MI	MI	MJ	MJ	MI			MJ					
STOA	S	60.8	5.00	9	75	85	211	3	2.7	MJ		MI		MJ	MI				MI			MI		
SD3055		61.8	4.75	9	75	80	220	3	3.7										MI			MI	MI	
SD3056		61.4	4.25	9	70	85	228	3	3.7	MI					MI				MI			MI		
SD3080		60.8	5.00	9	65	80	220	3	3.7	MI		MI							MI			MI	MI	
SD8072		61.4	4.25	9	65	90	214	3	3.0	MJ		MI			MJ				MI			MI		
SD8073		62.1	5.00	9	70	85	200	4	3.3	MJ					MJ							MI		
SD8074		57.9	5.50	9	65	80	214	2	2.3	MJ				MJ	MI				MJ			MI	MI	
MN87150		57.9	3.25	7	70	80	206	2	2.3	MJ	MI	MI		MJ	MI			MI	MJ			MI	MI	
MN88170		59.0	2.25	5	75	85	193	1	2.7	MJ		MI			MI			MI	MJ	MI	MI	MI		MI
MN88189		60.0	4.50	9	70	80	215	2	3.0	MJ									MJ			MI	MI	
MN88320		59.6	4.00	9	75	85	207	2	3.0	MJ		MI							MJ			MI		
MN88334		57.6	3.00	7	75	85	193	1	3.0									MI	MJ			MI		MI
ND655		62.5	4.75	9	70	80	223	4	4.0													MI	MI	
ND657		61.4	4.75	9	75	85	229	3	3.3	MJ					MI				MI			MI		
ND662		61.4	7.75	9	70	85	218	2	3.3										MI	MI		MI		
ND671		64.4	4.50	9	80	80	228	4	4.0	MI					MI								MI	
ND672		60.5	5.00	9	85	80	220	3	3.7										MI				MI	
XW398A4		63.1	6.50	9	80	80	208	3	3.0	MJ		MI			MJ					MI			MI	
N86-0542		60.0	5.25	9	75	85	211	2	2.7	MJ		MI			MJ				MJ			MI		
N87-0306		65.1	4.75	9	75	70	231	4	3.7	MJ		MI										MI	MI	
N88-3136		60.3	5.25	9	75	85	229	2	3.3	MI									MJ			MI		
N88-3034		57.3	3.50	9	75	85	236	2	3.0	MJ									MJ			MI		
N87-467		60.0	5.75	9	70	85	224	1	2.3	MJ		MI			MJ				MJ	MI		MI		
FA87-350		60.0	5.00	9	70	80	228	2	3.0	MJ		MI							MJ			MI	MI	
CI982-309		59.0	5.75	9	80	85	213	1	2.0	MJ				MJ	MI				MJ	MI				
AC-MINTO		60.0	3.00	9	75	85	217	2	3.0	MJ									MJ			MI		
BW148		61.4	3.50	9	80	80	196	2	3.3						MI				MI				MI	MI
ID0367		58.6	6.25	9	85	80	207	1	2.7	MJ					MI				MJ	MI			MI	

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	21.6	8	13.9	53.9	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	75	80	197
MAJOR FAULTING VALUES	56.9	18.6	18	12.9	51.9	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	50	50	187

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

TABLE 6 NORTHEAST REGION

VARIETY=AC-MINTO

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	56.0000000	4.1755239	49.0000000	59.7000000	17.4350000	7.4562927
K_WT	27.3200000	3.7652357	20.7000000	30.0000000	14.1770000	13.7819755
LG	39.4000000	12.7593103	22.0000000	56.0000000	162.8000000	32.3840364
SM	3.0000000	4.5276926	0	11.0000000	20.5000000	150.9230856
WHT_ASH	1.9000000	0.2131901	1.6800000	2.2500000	0.0454500	11.2205293
WHT_PRO	16.1600000	0.5319774	15.3000000	16.6000000	0.2830000	3.2919396
HARD	68.2000000	6.8337398	60.0000000	77.0000000	46.7000000	10.0201464
EXTR	59.7400000	2.2311432	56.0000000	61.9000000	4.9780000	3.7347560
FL_ASH	0.5500000	0.0984886	0.4400000	0.7100000	0.0097000	17.9070142
FL_PRO	15.7400000	0.7987490	14.4000000	16.3000000	0.6380000	5.0746444
MIXO	2.8000000	0.4472136	2.0000000	3.0000000	0.2000000	15.9719141
BAKE_ABS	59.6000000	1.5049917	57.9000000	61.4000000	2.2650000	2.5251538
LOAF_VOL	203.8000000	10.9407495	190.0000000	217.0000000	119.7000000	5.3683756

VARIETY=BUTTE 86

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.6600000	2.2345022	57.6000000	63.1000000	4.9930000	3.7453942
K_WT	30.8600000	3.7340327	26.9000000	36.1000000	13.9430000	12.0999114
LG	46.0000000	13.7295302	31.0000000	65.0000000	188.5000000	29.8468048
SM	2.8000000	2.7748874	0	7.0000000	7.7000000	99.1031209
WHT_ASH	1.7420000	0.1572260	1.5800000	1.9600000	0.0247200	9.0256000
WHT_PRO	15.3400000	0.7092249	14.3000000	16.1000000	0.5030000	4.6233698
HARD	76.2000000	7.1902712	70.0000000	88.0000000	51.7000000	9.4360514
EXTR	63.1400000	2.5637863	59.1000000	65.7000000	6.5730000	4.0604787
FL_ASH	0.4380000	0.0109545	0.4200000	0.4500000	0.000120000	2.5010162
FL_PRO	14.5800000	0.3563706	14.1000000	15.1000000	0.1270000	2.4442428
MIXO	2.8000000	0.8366600	2.0000000	4.0000000	0.7000000	29.8807152
BAKE_ABS	60.9800000	0.8467585	60.0000000	62.1000000	0.7170000	1.3885840
LOAF_VOL	194.2000000	14.6184815	178.0000000	215.0000000	213.7000000	7.5275394

VARIETY=BW148

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.5000000	1.7421251	57.2000000	61.9000000	3.0350000	2.9279414
K_WT	29.4400000	2.8814927	25.4000000	32.3000000	8.3030000	9.7876789
LG	42.0000000	8.4261498	33.0000000	51.0000000	71.0000000	20.0622614
SM	2.4000000	3.2863353	0	8.0000000	10.8000000	136.9306394
WHT_ASH	1.8540000	0.0763544	1.7500000	1.9300000	0.0058300	4.1183623
WHT_PRO	16.4800000	0.3768289	15.9000000	16.9000000	0.1420000	2.2865830
HARD	74.4000000	7.4363970	64.0000000	83.0000000	55.3000000	9.9951572
EXTR	62.1000000	2.7230498	57.3000000	63.9000000	7.4150000	4.3849433
FL_ASH	0.4940000	0.0482701	0.4400000	0.5700000	0.0023300	9.7712699
FL_PRO	16.1400000	0.7635444	14.8000000	16.7000000	0.5830000	4.7307582
MIXO	3.0000000	0.7071068	2.0000000	4.0000000	0.5000000	23.5702260
BAKE_ABS	60.3000000	1.1704700	58.6000000	61.4000000	1.3700000	1.9410779
LOAF_VOL	195.4000000	12.6214104	182.0000000	215.0000000	159.3000000	6.4592684

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

TABLE 7 NORTHEAST REGION

VARIETY=CHRIS

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	55.5000000	3.4154063	49.8000000	58.7000000	11.6650000	6.1538852
K_WT	22.2600000	2.5402756	18.0000000	24.2000000	6.4530000	11.4118400
LG	18.0000000	4.0620192	11.0000000	21.0000000	16.5000000	22.5667733
SM	10.0000000	9.1923882	2.0000000	25.0000000	84.5000000	91.9238816
WHT_ASH	1.8260000	0.2199545	1.5600000	2.1400000	0.0483800	12.0457032
WHT_PRO	15.6800000	0.4969909	15.3000000	16.4000000	0.2470000	3.1695851
HARD	64.0000000	4.3011626	59.0000000	70.0000000	18.5000000	6.7205666
EXTR	58.1000000	4.8862051	52.9000000	65.2000000	23.8750000	8.4099915
FL_ASH	0.5300000	0.0827647	0.4700000	0.6700000	0.0068500	15.6159862
FL_PRO	15.2600000	0.8590693	14.2000000	16.3000000	0.7380000	5.6295496
MIXO	3.0000000	0.7071068	2.0000000	4.0000000	0.5000000	23.5702260
BAKE_ABS	60.1800000	1.2316655	58.2000000	61.3000000	1.5170000	2.0466360
LOAF_VOL	192.6000000	11.7601020	178.0000000	207.0000000	138.3000000	6.1059720

VARIETY=CI982309

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	51.6600000	3.1816662	47.8000000	54.5000000	10.1230000	6.1588584
K_WT	23.5200000	2.7334959	20.2000000	26.0000000	7.4720000	11.6220065
LG	18.2000000	8.2583291	7.0000000	28.0000000	68.2000000	45.3754348
SM	9.8000000	7.1902712	3.0000000	18.0000000	51.7000000	73.3701143
WHT_ASH	2.0260000	0.2615913	1.7900000	2.4100000	0.0684300	12.9117120
WHT_PRO	15.0000000	0.3937004	14.4000000	15.4000000	0.1550000	2.6246693
HARD	53.2000000	4.2071368	49.0000000	60.0000000	17.7000000	7.9081519
EXTR	54.7400000	4.6203896	51.2000000	62.0000000	21.3480000	8.4406094
FL_ASH	0.6020000	0.0973139	0.5100000	0.7200000	0.0094700	16.1651038
FL_PRO	14.7600000	0.3847077	14.3000000	15.2000000	0.1480000	2.6064206
MIXO	4.0000000	0	4.0000000	4.0000000	0	0
BAKE_ABS	59.4400000	1.3667480	57.6000000	61.4000000	1.8680000	2.2993741
LOAF_VOL	203.4000000	10.7377838	194.0000000	217.0000000	115.3000000	5.2791464

VARIETY=ERA

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	53.0000000	3.9198214	47.5000000	58.4000000	15.3650000	7.3958895
K_WT	21.1600000	2.7437201	18.5000000	25.3000000	7.5280000	12.9665411
LG	13.0000000	5.7445626	6.0000000	22.0000000	33.0000000	44.1889434
SM	14.6000000	7.4027022	7.0000000	24.0000000	54.8000000	50.7034398
WHT_ASH	2.0780000	0.2874369	1.6800000	2.3400000	0.0826200	13.8323845
WHT_PRO	14.8200000	0.3834058	14.4000000	15.3000000	0.1470000	2.5870836
HARD	62.0000000	7.1063352	55.0000000	74.0000000	50.5000000	11.4618310
EXTR	59.7800000	5.5088111	53.1000000	68.0000000	30.3470000	9.2151407
FL_ASH	0.6560000	0.1372224	0.5000000	0.8600000	0.0188300	20.9180560
FL_PRO	14.0600000	0.5899152	13.2000000	14.6000000	0.3480000	4.1956988
MIXO	3.0000000	0.7071068	2.0000000	4.0000000	0.5000000	23.5702260
BAKE ABS	58.6200000	1.7152259	56.2000000	60.3000000	2.9420000	2.9260081
LOAF_VOL	203.8000000	16.0530371	190.0000000	229.0000000	257.7000000	7.8768582

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

NORTHEAST REGION

TABLE 8

VARIETY=FA987350

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	56.1400000	3.2035917	52.2000000	60.1000000	10.2630000	5.7064334
K_WT	29.0200000	4.7996875	23.9000000	35.5000000	23.0370000	16.5392401
LG	33.6000000	18.1741575	15.0000000	60.0000000	330.3000000	54.0897544
SM	6.2000000	6.3007936	0	15.0000000	39.7000000	101.6257032
WHT_ASH	1.9060000	0.2534364	1.5600000	2.2300000	0.0642300	13.2967672
WHT_PRO	15.1400000	0.4037326	14.6000000	15.7000000	0.1630000	2.6666617
HARD	49.6000000	8.8487287	40.0000000	58.0000000	78.3000000	17.8401789
EXTR	59.1400000	2.7409852	56.3000000	63.6000000	7.5130000	4.6347400
FL_ASH	0.5120000	0.0729383	0.3900000	0.5700000	0.0053200	14.2457676
FL_PRO	14.6600000	0.3209361	14.3000000	15.1000000	0.1030000	2.1891960
MIXO	2.6000000	0.8944272	2.0000000	4.0000000	0.8000000	34.4010458
BAKE_ABS	58.6000000	0.8831761	57.6000000	60.0000000	0.7800000	1.5071264
LOAF_VOL	203.4000000	17.1842952	185.0000000	228.0000000	295.3000000	8.4485227

VARIETY=ID367

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	54.1400000	2.2908514	50.5000000	56.2000000	5.2480000	4.2313472
K_WT	23.1400000	1.0945319	21.3000000	24.0000000	1.1980000	4.7300426
LG	9.4000000	1.6733201	8.0000000	12.0000000	2.8000000	17.8012772
SM	8.2000000	3.7013511	3.0000000	13.0000000	13.7000000	45.1384281
WHT_ASH	1.9640000	0.1484251	1.7800000	2.1000000	0.0220300	7.5572844
WHT_PRO	14.3600000	0.3781534	14.0000000	14.8000000	0.1430000	2.6333803
HARD	49.8000000	8.0436310	38.0000000	57.0000000	64.7000000	16.1518695
EXTR	57.2800000	3.0970954	54.9000000	62.1000000	9.5920000	5.4069403
FL_ASH	0.5480000	0.0679706	0.4300000	0.5900000	0.0046200	12.4033909
FL_PRO	13.8600000	0.4560702	13.4000000	14.4000000	0.2080000	3.2905496
MIXO	3.0000000	0.7071068	2.0000000	4.0000000	0.5000000	23.5702260
BAKE_ABS	57.1200000	1.2774976	55.3000000	58.6000000	1.6320000	2.2365153
LOAF_VOL	200.0000000	6.0415230	194.0000000	207.0000000	36.5000000	3.0207615

VARIETY=MARQUIS

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	55.2800000	3.9258120	49.3000000	60.2000000	15.4120000	7.1016860
K_WT	21.5200000	2.3952035	17.7000000	23.6000000	5.7370000	11.1301280
LG	13.0000000	6.5574385	6.0000000	22.0000000	43.0000000	50.4418348
SM	11.4000000	10.9224539	0	29.0000000	119.3000000	95.8109994
WHT_ASH	2.0000000	0.1896049	1.8300000	2.3000000	0.0359500	9.4802426
WHT_PRO	14.6400000	1.2837445	12.8000000	15.8000000	1.6480000	8.7687467
HARD	60.2000000	6.0580525	52.0000000	67.0000000	36.7000000	10.0632101
EXTR	55.4200000	5.6353350	49.1000000	63.8000000	31.7570000	10.1684138
FL_ASH	0.6040000	0.0870632	0.5100000	0.7400000	0.0075800	14.4144363
FL_PRO	14.1600000	1.3277801	12.6000000	15.4000000	1.7630000	9.3769781
MIXO	2.4000000	0.8944272	1.0000000	3.0000000	0.8000000	37.2677996
BAKE_ABS	56.9400000	2.0132064	55.3000000	60.0000000	4.0530000	3.5356628
LOAF_VOL	189.4000000	9.5551033	180.0000000	202.0000000	91.3000000	5.0449331

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

TABLE 9

NORTHEAST REGION

VARIETY=MN87150

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	56.4400000	4.1088928	51.8000000	61.0000000	16.8830000	7.2801077
K_WT	26.8200000	4.9454019	20.6000000	32.5000000	24.4570000	18.4392316
LG	25.4000000	19.7306868	6.0000000	57.0000000	389.3000000	77.6798691
SM	7.2000000	7.7265775	0	16.0000000	59.7000000	107.3135765
WHT_ASH	1.7600000	0.2487971	1.4800000	2.0700000	0.0619000	14.1361992
WHT_PRO	14.1200000	0.4086563	13.8000000	14.8000000	0.1670000	2.8941667
HARD	51.8000000	6.2209324	44.0000000	59.0000000	38.7000000	12.0095220
EXTR	57.9600000	7.7063610	45.7000000	64.9000000	59.3880000	13.2959990
FL_ASH	0.5060000	0.0826438	0.3800000	0.5900000	0.0068300	16.3327696
FL_PRO	13.3200000	0.5761944	12.7000000	14.1000000	0.3320000	4.3257839
MIXO	1.4000000	0.5477226	1.0000000	2.0000000	0.3000000	39.1230398
BAKE_ABS	57.1000000	2.7631504	53.5000000	61.0000000	7.6350000	4.8391425
LOAF_VOL	187.4000000	13.0499042	170.0000000	206.0000000	170.3000000	6.9636629

VARIETY=MN88170

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	55.6600000	3.6691961	51.5000000	59.7000000	13.4630000	6.5921597
K_WT	28.3800000	3.1728536	23.5000000	31.0000000	10.0670000	11.1798929
LG	34.0000000	13.1719399	13.0000000	48.0000000	173.5000000	38.7409996
SM	4.8000000	4.4384682	1.0000000	11.0000000	19.7000000	92.4680876
WHT_ASH	1.7900000	0.2198863	1.5100000	2.0600000	0.0483500	12.2841528
WHT_PRO	14.2800000	0.4266146	13.8000000	14.7000000	0.1820000	2.9874971
HARD	57.8000000	8.1055537	49.0000000	65.0000000	65.7000000	14.0234492
EXTR	63.8400000	3.6596448	58.1000000	67.6000000	13.3930000	5.7325263
FL_ASH	0.4800000	0.0710634	0.3800000	0.5800000	0.0050500	14.8048650
FL_PRO	13.1400000	0.4159327	12.5000000	13.5000000	0.1730000	3.1653934
MIXO	1.4000000	0.5477226	1.0000000	2.0000000	0.3000000	39.1230398
BAKE_ABS	58.9200000	1.5674821	56.9000000	60.8000000	2.4570000	2.6603565
LOAF_VOL	178.0000000	8.9442719	171.0000000	193.0000000	80.0000000	5.0248719

VARIETY=MN88189

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	57.7000000	3.7861590	54.2000000	61.9000000	14.3350000	6.5618007
K_WT	31.7800000	4.7367711	27.5000000	37.7000000	22.4370000	14.9048806
LG	46.0000000	19.1702895	24.0000000	70.0000000	367.5000000	41.6745424
SM	2.2000000	2.4899799	0	6.0000000	6.2000000	113.1809054
WHT_ASH	1.7500000	0.1759261	1.5100000	1.9600000	0.0309500	10.0529212
WHT_PRO	14.5800000	0.5718391	13.8000000	15.1000000	0.3270000	3.9220791
HARD	54.8000000	5.5407581	48.0000000	61.0000000	30.7000000	10.1108724
EXTR	63.8800000	4.3424647	56.4000000	67.0000000	18.8570000	6.7978471
FL_ASH	0.4480000	0.0732803	0.3600000	0.5500000	0.0053700	16.3572062
FL_PRO	14.0200000	0.3346640	13.6000000	14.4000000	0.1120000	2.3870472
MIXO	2.8000000	0.8366600	2.0000000	4.0000000	0.7000000	29.8807152
BAKE_ABS	58.6000000	2.1295539	55.5000000	61.1000000	4.5350000	3.6340511
LOAF_VOL	202.0000000	9.9749687	187.0000000	215.0000000	99.5000000	4.9381033

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

NORTHEAST REGION

TABLE 10

VARIETY=MN88320

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.7600000	2.9022405	56.9000000	63.4000000	8.4230000	4.8564935
K_WT	28.4200000	3.7519328	24.2000000	32.7000000	14.0770000	13.2017341
LG	40.6000000	17.1697408	19.0000000	61.0000000	294.8000000	42.2900020
SM	3.8000000	4.8166378	0	10.0000000	23.2000000	126.7536271
WHT_ASH	1.7280000	0.1776795	1.4900000	1.9200000	0.0315700	10.2823777
WHT_PRO	13.8400000	0.3646917	13.4000000	14.4000000	0.1330000	2.6350553
HARD	63.6000000	8.0808415	54.0000000	72.0000000	65.3000000	12.7057257
EXTR	62.7200000	3.9908646	58.3000000	68.6000000	15.9270000	6.3629856
FL_ASH	0.4720000	0.0420714	0.4000000	0.5100000	0.0017700	8.9134254
FL_PRO	12.7400000	0.4335897	12.3000000	13.3000000	0.1880000	3.4033726
MIXO	2.6000000	0.5477226	2.0000000	3.0000000	0.3000000	21.0662522
BAKE_ABS	59.2200000	0.9338094	57.9000000	60.0000000	0.8720000	1.5768480
LOAF_VOL	190.2000000	10.1833197	182.0000000	207.0000000	103.7000000	5.3540061

VARIETY=MN88334

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	58.9000000	3.7101213	53.7000000	63.2000000	13.7650000	6.2990175
K_WT	24.6000000	2.4010414	21.2000000	27.7000000	5.7650000	9.7603311
LG	21.0000000	8.2764727	13.0000000	33.0000000	68.5000000	39.4117747
SM	8.4000000	6.1481705	3.0000000	19.0000000	37.8000000	73.1925055
WHT_ASH	1.6820000	0.1567482	1.4700000	1.9100000	0.0245700	9.3191561
WHT_PRO	14.5400000	0.2073644	14.3000000	14.8000000	0.0430000	1.4261652
HARD	57.0000000	5.7879185	48.0000000	63.0000000	33.5000000	10.1542429
EXTR	61.9600000	5.7155927	52.5000000	67.1000000	32.6680000	9.2246493
FL_ASH	0.4300000	0.0509902	0.3700000	0.5100000	0.0026000	11.8581849
FL_PRO	13.6200000	0.1303840	13.5000000	13.8000000	0.0170000	0.9572984
MIXO	1.8000000	0.4472136	1.0000000	2.0000000	0.2000000	24.8451997
BAKE_ABS	57.0400000	0.6503845	56.2000000	57.6000000	0.4230000	1.1402253
LOAF_VOL	181.8000000	7.8549348	172.0000000	193.0000000	61.7000000	4.3206462

VARIETY=ND655

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.2600000	2.6264044	57.6000000	63.8000000	6.8980000	4.3584540
K_WT	27.9600000	3.3125519	23.7000000	31.4000000	10.9730000	11.8474674
LG	39.8000000	15.1393527	20.0000000	58.0000000	229.2000000	38.0385746
SM	4.0000000	3.8729833	0	9.0000000	15.0000000	96.8245837
WHT_ASH	1.7400000	0.1595306	1.5100000	1.9400000	0.0254500	9.1684231
WHT_PRO	15.5400000	0.4393177	14.8000000	15.9000000	0.1930000	2.8270119
HARD	66.8000000	9.5760117	56.0000000	77.0000000	91.7000000	14.3353469
EXTR	64.2400000	2.2322634	61.4000000	66.5000000	4.9830000	3.4748808
FL_ASH	0.4500000	0.0479583	0.4000000	0.5200000	0.0023000	10.6574034
FL_PRO	15.2400000	0.2302173	14.9000000	15.5000000	0.0530000	1.5106121
MIXO	3.2000000	0.8366600	2.0000000	4.0000000	0.7000000	26.1456258
BAKE_ABS	60.9000000	1.0559356	59.6000000	62.5000000	1.1150000	1.7338844
LOAF_VOL	201.8000000	12.3166554	192.0000000	223.0000000	151.7000000	6.1033971

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

NORTHEAST REGION

TABLE 11

VARIETY=ND657

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	57.8800000	3.1059620	55.0000000	61.3000000	9.6470000	5.3662094
K_WT	28.7000000	3.4878360	25.8000000	32.7000000	12.1650000	12.1527387
LG	33.8000000	15.7384879	17.0000000	51.0000000	247.7000000	46.5635735
SM	3.0000000	3.7416574	0	9.0000000	14.0000000	124.7219129
WHT_ASH	1.8380000	0.1948589	1.5500000	2.0600000	0.0379700	10.6016824
WHT_PRO	15.9800000	0.3346640	15.6000000	16.4000000	0.1120000	2.0942679
HARD	68.0000000	4.5276926	61.0000000	72.0000000	20.5000000	6.6583714
EXTR	62.6200000	1.9408761	60.2000000	65.0000000	3.7670000	3.0994508
FL_ASH	0.4960000	0.0522494	0.4400000	0.5800000	0.0027300	10.5341536
FL_PRO	15.5000000	0.4636809	15.0000000	16.1000000	0.2150000	2.9914898
MIXO	4.2000000	0.8366600	3.0000000	5.0000000	0.7000000	19.9204768
BAKE_ABS	61.4400000	0.6841053	60.5000000	62.1000000	0.4680000	1.1134526
LOAF_VOL	215.6000000	10.2127371	202.0000000	229.0000000	104.3000000	4.7368911

VARIETY=ND662

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	58.6800000	3.3491790	54.0000000	62.2000000	11.2170000	5.7075307
K_WT	29.9800000	4.0313769	24.0000000	34.6000000	16.2520000	13.4468877
LG	40.2000000	15.2545075	18.0000000	55.0000000	232.7000000	37.9465361
SM	3.8000000	6.3403470	0	15.0000000	40.2000000	166.8512367
WHT_ASH	1.7620000	0.1811629	1.5600000	2.0400000	0.0328200	10.2816635
WHT_PRO	15.3600000	0.4159327	14.8000000	15.8000000	0.1730000	2.7078951
HARD	62.4000000	5.2249402	57.0000000	70.0000000	27.3000000	8.3733016
EXTR	64.0000000	1.3397761	62.3000000	66.0000000	1.7950000	2.0934002
FL_ASH	0.4780000	0.0630079	0.4100000	0.5700000	0.0039700	13.1815766
FL_PRO	14.7600000	0.3714835	14.2000000	15.1000000	0.1380000	2.5168260
MIXO	5.2000000	1.4832397	3.0000000	7.0000000	2.2000000	28.5238403
BAKE_ABS	59.7200000	1.9485892	56.9000000	61.4000000	3.7970000	3.2628755
LOAF_VOL	193.6000000	14.6389890	180.0000000	218.0000000	214.3000000	7.5614613

VARIETY=ND671

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	61.2200000	2.3657980	57.6000000	63.5000000	5.5970000	3.8644201
K_WT	29.0600000	3.2261432	24.4000000	31.9000000	10.4080000	11.1016628
LG	44.4000000	15.6460858	24.0000000	60.0000000	244.8000000	35.2389319
SM	2.2000000	3.0331502	0	6.0000000	9.2000000	137.8704626
WHT_ASH	1.7540000	0.2514558	1.5500000	2.1800000	0.0632300	14.3361324
WHT_PRO	15.6400000	0.5224940	15.1000000	16.5000000	0.2730000	3.3407546
HARD	66.2000000	4.9699095	60.0000000	73.0000000	24.7000000	7.5074161
EXTR	62.4200000	3.5835736	56.4000000	66.0000000	12.8420000	5.7410664
FL_ASH	0.4260000	0.0864870	0.3800000	0.5800000	0.0074800	20.3021111
FL_PRO	15.3400000	0.6618157	14.8000000	16.4000000	0.4380000	4.3143135
MIXO	4.0000000	1.0000000	3.0000000	5.0000000	1.0000000	25.0000000
BAKE_ABS	62.5200000	1.1519549	61.4000000	64.4000000	1.3270000	1.8425382
LOAF_VOL	208.0000000	15.0332964	188.0000000	228.0000000	226.0000000	7.2275463

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

NORTHEAST REGION

TABLE 12

VARIETY=ND672

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.7000000	2.6981475	55.8000000	62.3000000	7.2800000	4.5195101
K_WT	27.1000000	3.0919250	23.0000000	30.5000000	9.5600000	11.4093172
LG	35.8000000	16.0374562	15.0000000	53.0000000	257.2000000	44.7973636
SM	3.8000000	4.9699095	0	12.0000000	24.7000000	130.7870909
WHT_ASH	1.7800000	0.1656804	1.5900000	2.0200000	0.0274500	9.3078885
WHT_PRO	15.2600000	0.6877500	14.5000000	16.2000000	0.4730000	4.5068804
HARD	77.0000000	6.5192024	71.0000000	86.0000000	42.5000000	8.4664966
EXTR	61.3000000	2.9874738	57.7000000	64.9000000	8.9250000	4.8735299
FL_ASH	0.5080000	0.0580517	0.4200000	0.5600000	0.0033700	11.4275002
FL_PRO	14.2200000	1.0207840	13.1000000	15.4000000	1.0420000	7.1785092
MIXO	4.6000000	1.5165751	3.0000000	7.0000000	2.3000000	32.9690237
BAKE_ABS	59.9400000	1.0573552	58.6000000	60.8000000	1.1180000	1.7640227
LOAF_VOL	201.0000000	14.1067360	189.0000000	220.0000000	199.0000000	7.0182766

VARIETY=N86-0542

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	55.8800000	3.5884537	51.3000000	60.3000000	12.8770000	6.4217139
K_WT	25.8200000	3.0268796	22.4000000	30.2000000	9.1620000	11.7230038
LG	24.0000000	11.6619038	11.0000000	42.0000000	136.0000000	48.5912658
SM	8.0000000	6.3245553	2.0000000	18.0000000	40.0000000	79.0569415
WHT_ASH	1.8760000	0.2242320	1.5800000	2.1800000	0.0502800	11.9526665
WHT_PRO	14.1000000	0.2121320	13.9000000	14.4000000	0.0450000	1.5044825
HARD	57.8000000	6.3796552	51.0000000	68.0000000	40.7000000	11.0374657
EXTR	61.1600000	3.2913523	57.3000000	65.4000000	10.8330000	5.3815440
FL_ASH	0.5560000	0.0890505	0.4400000	0.6600000	0.0079300	16.0162855
FL_PRO	13.3400000	0.2509980	13.1000000	13.6000000	0.0630000	1.8815443
MIXO	3.2000000	0.8366600	2.0000000	4.0000000	0.7000000	26.1456258
BAKE_ABS	58.8800000	2.1182540	55.3000000	60.8000000	4.4870000	3.5975781
LOAF_VOL	198.0000000	10.3440804	183.0000000	211.0000000	107.0000000	5.2242830

VARIETY=N87-0306

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	57.1800000	3.7419246	54.2000000	61.8000000	14.0020000	6.5441144
K_WT	27.7200000	4.9901904	23.0000000	34.5000000	24.9020000	18.0021298
LG	30.4000000	20.6591384	9.0000000	61.0000000	426.8000000	67.9576922
SM	5.4000000	4.5055521	1.0000000	10.0000000	20.3000000	83.4361506
WHT_ASH	1.8480000	0.2233159	1.5400000	2.1500000	0.0498700	12.0841948
WHT_PRO	15.2600000	0.4827007	14.7000000	15.9000000	0.2330000	3.1631765
HARD	58.4000000	8.7635609	50.0000000	70.0000000	76.8000000	15.0060975
EXTR	62.6400000	2.5793410	60.0000000	65.7000000	6.6530000	4.1177219
FL_ASH	0.4800000	0.0754983	0.3900000	0.5600000	0.0057000	15.7288217
FL_PRO	14.6400000	0.4037326	14.2000000	15.2000000	0.1630000	2.7577362
MIXO	3.8000000	1.3038405	3.0000000	6.0000000	1.7000000	34.3115916
BAKE_ABS	60.4400000	3.0204304	57.6000000	65.1000000	9.1230000	4.9974031
LOAF_VOL	209.2000000	14.6355731	195.0000000	231.0000000	214.2000000	6.9959718

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

TABLE 13 NORTHEAST REGION

VARIETY=N87-467

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	56.0600000	4.0358394	52.2000000	62.2000000	16.2880000	7.1991428
K_WT	27.2800000	4.6451050	23.1000000	34.5000000	21.5770000	17.0275108
LG	24.4000000	18.4472220	7.0000000	54.0000000	340.3000000	75.6033689
SM	7.4000000	6.9498201	0	17.0000000	48.3000000	93.9164884
WHT_ASH	1.8860000	0.2703331	1.4900000	2.1800000	0.0730800	14.3336759
WHT_PRO	14.2200000	0.3898718	14.0000000	14.9000000	0.1520000	2.7417143
HARD	42.6000000	5.5045436	37.0000000	51.0000000	30.3000000	12.9214638
EXTR	61.0400000	4.2175822	54.7000000	65.4000000	17.7880000	6.9095384
FL_ASH	0.5480000	0.0941807	0.4000000	0.6400000	0.0088700	17.1862550
FL_PRO	13.4800000	0.3834058	13.0000000	13.9000000	0.1470000	2.8442566
MIXO	3.0000000	1.2247449	2.0000000	5.0000000	1.5000000	40.8248290
BAKE_ABS	58.7600000	1.1371016	57.3000000	60.0000000	1.2930000	1.9351627
LOAF_VOL	205.2000000	12.2147452	194.0000000	224.0000000	149.2000000	5.9526049

VARIETY=N88-3034

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	56.1000000	3.8249183	50.2000000	60.1000000	14.6300000	6.8180362
K_WT	26.7800000	2.4324884	23.9000000	29.1000000	5.9170000	9.0832279
LG	28.2000000	8.0124902	16.0000000	36.0000000	64.2000000	28.4130860
SM	3.0000000	3.1622777	0	8.0000000	10.0000000	105.4092553
WHT_ASH	1.9520000	0.2666833	1.6700000	2.3000000	0.0711200	13.6620560
WHT_PRO	16.2200000	0.1303840	16.1000000	16.4000000	0.0170000	0.8038474
HARD	59.4000000	5.5946403	52.0000000	65.0000000	31.3000000	9.4185864
EXTR	63.0400000	2.2478879	60.0000000	66.0000000	5.0530000	3.5658120
FL_ASH	0.5000000	0.0836660	0.4000000	0.6300000	0.0070000	16.7332005
FL_PRO	16.1200000	0.2167948	16.0000000	16.5000000	0.0470000	1.3448811
MIXO	3.2000000	0.8366600	2.0000000	4.0000000	0.7000000	26.1456258
BAKE_ABS	60.4200000	2.4712345	57.3000000	63.7000000	6.1070000	4.0900935
LOAF_VOL	217.8000000	13.1034347	205.0000000	236.0000000	171.7000000	6.0162694

VARIETY=N88-3136

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.0400000	2.8588459	57.2000000	63.6000000	8.1730000	4.7615688
K_WT	29.7200000	2.6799254	26.1000000	32.9000000	7.1820000	9.0172455
LG	47.0000000	14.2478068	26.0000000	60.0000000	203.0000000	30.3144827
SM	1.8000000	3.0331502	0	7.0000000	9.2000000	168.5083432
WHT_ASH	1.7580000	0.1811629	1.5200000	1.9500000	0.0328200	10.3050575
WHT_PRO	15.0400000	0.3646917	14.4000000	15.3000000	0.1330000	2.4248115
HARD	54.0000000	8.1240384	48.0000000	68.0000000	66.0000000	15.0445156
EXTR	63.0200000	2.8083803	58.4000000	65.1000000	7.8870000	4.4563318
FL_ASH	0.4540000	0.0466905	0.3800000	0.5000000	0.0021800	10.2842445
FL_PRO	14.6600000	0.4159327	14.2000000	15.1000000	0.1730000	2.8371943
MIXO	3.4000000	1.1401754	2.0000000	5.0000000	1.3000000	33.5345713
BAKE_ABS	59.9000000	1.3076697	58.2000000	61.8000000	1.7100000	2.1830880
LOAF_VOL	216.0000000	8.5732141	208.0000000	229.0000000	73.5000000	3.9690806

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

TABLE 14 NORTHEAST REGION

VARIETY=SD3055

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.6800000	1.9253571	57.9000000	62.0000000	3.7070000	3.2261346
K_WT	30.7200000	4.1823438	26.7000000	36.9000000	17.4920000	13.6144005
LG	51.6000000	15.2741612	35.0000000	74.0000000	233.3000000	29.6010876
SM	2.2000000	3.8340579	0	9.0000000	14.7000000	174.2753592
WHT_ASH	1.7420000	0.1709386	1.4800000	1.8800000	0.0292200	9.8127776
WHT_PRO	15.6200000	0.4919350	14.9000000	16.2000000	0.2420000	3.1493915
HARD	56.6000000	5.1283526	49.0000000	62.0000000	26.3000000	9.0606936
EXTR	61.3000000	3.8619943	55.7000000	66.4000000	14.9150000	6.3001538
FL_ASH	0.4420000	0.0294958	0.4000000	0.4700000	0.000870000	6.6732494
FL_PRO	15.3200000	0.3962323	14.8000000	15.9000000	0.1570000	2.5863724
MIXO	3.4000000	0.5477226	3.0000000	4.0000000	0.3000000	16.1094870
BAKE_ABS	60.4000000	1.2103718	58.6000000	61.8000000	1.4650000	2.0039269
LOAF_VOL	213.6000000	11.5887877	193.0000000	220.0000000	134.3000000	5.4254624

VARIETY=SD3056

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.5800000	2.0092287	57.5000000	62.0000000	4.0370000	3.3723208
K_WT	31.3000000	3.7363083	27.6000000	37.0000000	13.9600000	11.9370873
LG	52.0000000	16.6733320	34.0000000	76.0000000	278.0000000	32.0641000
SM	1.8000000	2.6832816	0	6.0000000	7.2000000	149.0711985
WHT_ASH	1.7320000	0.1559487	1.5000000	1.9200000	0.0243200	9.0039671
WHT_PRO	15.4200000	0.4816638	14.8000000	15.8000000	0.2320000	3.1236302
HARD	75.0000000	7.9686887	67.0000000	85.0000000	63.5000000	10.6249183
EXTR	61.2000000	3.6013886	55.7000000	65.7000000	12.9700000	5.8846219
FL_ASH	0.5160000	0.0482701	0.4800000	0.6000000	0.0023300	9.3546654
FL_PRO	14.6800000	0.2167948	14.4000000	14.9000000	0.0470000	1.4768040
MIXO	3.2000000	0.8366600	2.0000000	4.0000000	0.7000000	26.1456258
BAKE_ABS	60.6600000	0.9262829	59.6000000	61.8000000	0.8580000	1.5270077
LOAF_VOL	206.4000000	13.7222447	190.0000000	228.0000000	188.3000000	6.6483744

VARIETY=SD3080

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	61.1000000	2.8861739	57.4000000	63.9000000	8.3300000	4.7236889
K_WT	30.3400000	5.1834352	23.8000000	35.6000000	26.8680000	17.0844929
LG	44.2000000	18.7403308	20.0000000	64.0000000	351.2000000	42.3989386
SM	4.2000000	5.3103672	0	10.0000000	28.2000000	126.4373147
WHT_ASH	1.6800000	0.1870829	1.4800000	1.9200000	0.0350000	11.1358851
WHT_PRO	15.7600000	0.4505552	15.3000000	16.4000000	0.2030000	2.8588529
HARD	67.2000000	5.3572381	58.0000000	71.0000000	28.7000000	7.9720805
EXTR	60.3400000	3.3849668	56.0000000	64.5000000	11.4580000	5.6098223
FL_ASH	0.4380000	0.0496991	0.4000000	0.5100000	0.0024700	11.3468252
FL_PRO	15.2600000	0.4560702	14.6000000	15.7000000	0.2080000	2.9886643
MIXO	4.2000000	1.6431677	3.0000000	7.0000000	2.7000000	39.1230398
BAKE_ABS	60.5200000	0.3271085	60.0000000	60.8000000	0.1070000	0.5404966
LOAF_VOL	212.2000000	11.0090872	195.0000000	222.0000000	121.2000000	5.1880712

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

TABLE 15 NORTHEAST REGION

VARIETY=SD8072

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.1200000	3.0621888	54.6000000	63.1000000	9.3770000	5.1796156
K_WT	30.0800000	5.5323594	22.4000000	36.6000000	30.6070000	18.3921521
LG	45.0000000	23.2056028	16.0000000	73.0000000	538.5000000	51.5680062
SM	3.4000000	3.8470768	0	8.0000000	14.8000000	113.1493180
WHT_ASH	1.8280000	0.2487368	1.4500000	2.1000000	0.0618700	13.6070464
WHT_PRO	15.4400000	0.5029911	14.7000000	16.0000000	0.2530000	3.2577141
HARD	72.4000000	7.0213959	62.0000000	80.0000000	49.3000000	9.6980606
EXTR	60.4600000	3.7280021	56.3000000	66.2000000	13.8980000	6.1660638
FL_ASH	0.5240000	0.0779744	0.4300000	0.6300000	0.0060800	14.8806021
FL_PRO	14.7800000	0.2683282	14.5000000	15.2000000	0.0720000	1.8154814
MIXO	3.0000000	0.7071068	2.0000000	4.0000000	0.5000000	23.5702260
BAKE_ABS	60.1600000	1.4570518	58.2000000	61.4000000	2.1230000	2.4219611
LOAF_VOL	202.2000000	11.3666178	190.0000000	214.0000000	129.2000000	5.6214727

VARIETY=SD8073

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	58.4000000	2.8451713	55.0000000	62.2000000	8.0950000	4.8718687
K_WT	29.9200000	5.0662609	22.6000000	36.4000000	25.6670000	16.9326903
LG	45.8000000	19.0052624	22.0000000	71.0000000	361.2000000	41.4962062
SM	2.6000000	3.1304952	0	6.0000000	9.8000000	120.4036603
WHT_ASH	1.8140000	0.2277718	1.4700000	2.0900000	0.0518800	12.5563294
WHT_PRO	14.9000000	0.3162278	14.4000000	15.2000000	0.1000000	2.1223340
HARD	71.4000000	5.5946403	65.0000000	79.0000000	31.3000000	7.8356307
EXTR	60.5200000	4.3372803	55.7000000	66.0000000	18.8120000	7.1666891
FL_ASH	0.5280000	0.0779102	0.4100000	0.6200000	0.0060700	14.7557206
FL_PRO	14.2800000	0.1788854	14.2000000	14.6000000	0.0320000	1.2526991
MIXO	3.8000000	1.0954451	2.0000000	5.0000000	1.2000000	28.8275030
BAKE_ABS	61.0800000	0.7726578	60.0000000	62.1000000	0.5970000	1.2649930
LOAF_VOL	192.2000000	8.7863531	180.0000000	200.0000000	77.2000000	4.5714636

VARIETY=SD8074

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.0200000	2.8278967	56.9000000	63.2000000	7.9970000	4.7115907
K_WT	29.6400000	2.6754439	25.5000000	32.9000000	7.1580000	9.0264639
LG	45.2000000	11.1445054	27.0000000	57.0000000	124.2000000	24.6559853
SM	2.0000000	2.3452079	0	5.0000000	5.5000000	117.2603940
WHT_ASH	1.7240000	0.1453616	1.5100000	1.9200000	0.0211300	8.4316484
WHT_PRO	14.8200000	0.6723095	14.2000000	15.8000000	0.4520000	4.5365010
HARD	71.0000000	6.5192024	61.0000000	79.0000000	42.5000000	9.1819752
EXTR	59.7800000	6.3558634	49.1000000	65.3000000	40.3970000	10.6320901
FL_ASH	0.4760000	0.0577062	0.4200000	0.5700000	0.0033300	12.1231412
FL_PRO	14.0200000	0.5585696	13.5000000	14.8000000	0.3120000	3.9840913
MIXO	4.4000000	0.8944272	3.0000000	5.0000000	0.8000000	20.3278907
BAKE_ABS	59.3400000	1.8174157	57.9000000	62.1000000	3.3030000	3.0627161
LOAF_VOL	190.8000000	15.8018986	172.0000000	214.0000000	249.7000000	8.2819175

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

TABLE 16 NORTHEAST REGION

VARIETY=STOA

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	57.8600000	2.2864820	55.4000000	61.4000000	5.2280000	3.9517491
K_WT	27.3400000	3.3283630	24.2000000	32.6000000	11.0780000	12.1739684
LG	26.8000000	11.1892806	16.0000000	44.0000000	125.2000000	41.7510470
SM	5.0000000	3.8729833	0	9.0000000	15.0000000	77.4596669
WHT_ASH	1.7940000	0.1700882	1.5200000	1.9900000	0.0289300	9.4809483
WHT_PRO	15.1200000	0.3768289	14.7000000	15.7000000	0.1420000	2.4922545
HARD	64.2000000	2.5884358	61.0000000	68.0000000	6.7000000	4.0318315
EXTR	61.4200000	6.0329926	51.7000000	67.5000000	36.3970000	9.8225214
FL_ASH	0.4720000	0.0641872	0.3900000	0.5700000	0.0041200	13.5989886
FL_PRO	14.8400000	0.5366563	14.3000000	15.7000000	0.2880000	3.6162824
MIXO	4.4000000	0.5477226	4.0000000	5.0000000	0.3000000	12.4482399
BAKE_ABS	61.0600000	1.6979399	59.3000000	63.1000000	2.8830000	2.7807729
LOAF_VOL	202.0000000	9.4868330	188.0000000	211.0000000	90.0000000	4.6964520

VARIETY=XW398A4

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	57.8200000	3.5017139	54.2000000	62.4000000	12.2620000	6.0562329
K_WT	28.8800000	4.3390091	24.2000000	34.6000000	18.8270000	15.0242697
LG	34.2000000	17.9916647	11.0000000	60.0000000	323.7000000	52.6072068
SM	4.4000000	4.8270074	0	11.0000000	23.3000000	109.7047126
WHT_ASH	1.9420000	0.2094517	1.6100000	2.1600000	0.0438700	10.7853587
WHT_PRO	14.6200000	0.4658326	14.2000000	15.3000000	0.2170000	3.1862694
HARD	53.8000000	10.6160256	46.0000000	71.0000000	112.7000000	19.7323896
EXTR	60.8200000	3.8401823	57.1000000	67.3000000	14.7470000	6.3140123
FL_ASH	0.5660000	0.1006479	0.4100000	0.6800000	0.0101300	17.7823147
FL_PRO	14.2800000	0.3271085	13.8000000	14.6000000	0.1070000	2.2906761
MIXO	3.8000000	1.0954451	3.0000000	5.0000000	1.2000000	28.8275030
BAKE_ABS	60.6800000	1.6813685	58.6000000	63.1000000	2.8270000	2.7708775
LOAF_VOL	206.6000000	10.1882285	196.0000000	220.0000000	103.8000000	4.9313788

TABLE 17

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=SOUTH DAKOTA STATION=BROOKINGS NURSERY=UNIFORM

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
BUTTE 86	S	56.6	29.4	39	2	1.72	15.2	75	3	59.6	0.52	14.3	5	4	61.4	5
CHRIS		54.9	21.8	19	4	1.86	15.3	67	3	62.2	0.51	15.5	5	4	60.3	4
ERA	S	53.0	20.8	9	14	1.96	14.9	68	3	59.5	0.57	14.0	5	4	57.3	4
MARQUIS		52.7	19.8	8	11	1.72	14.2	69	3	61.5	0.56	13.4	5	4	55.5	2
STOA	S	56.3	23.0	15	8	1.87	15.0	69	3	62.2	0.51	14.4	5	4	60.5	4
MN87150		53.1	24.6	15	8	1.76	14.7	56	3	55.0	0.55	14.4	5	2	56.9	3
MN88170		52.8	25.3	29	4	1.85	14.1	54	3	58.4	0.55	13.0	5	4	58.6	2
MN88189		55.0	28.3	39	2	1.84	14.6	53	3	58.4	0.47	13.8	5	4	57.6	4
MN88320		56.1	24.9	29	6	1.77	14.2	60	3	56.6	0.54	13.5	5	3	57.3	3
MN88334		56.1	28.1	15	11	1.79	14.6	63	3	60.6	0.46	14.3	5	4	56.5	2
ND655		56.8	24.4	24	6	1.90	15.1	63	3	58.8	0.50	14.7	5	4	59.6	4
ND657		54.6	27.9	34	4	1.98	16.5	76	3	55.6	0.61	16.4	5	1	60.3	5
ND662		55.4	25.6	23	6	1.79	15.3	70	3	59.0	0.54	14.9	5	4	56.9	7
ND671		58.6	26.7	33	3	1.93	14.8	66	4	60.3	0.47	14.6	5	4	59.3	5
ND672		54.0	22.1	15	11	1.68	14.5	70	3	53.9	0.60	13.1	4	2	55.5	4
N87-467		52.2	26.6	22	5	2.04	14.2	44	3	53.6	0.59	13.6	4	2	56.5	3
N860542		52.3	22.8	16	11	2.01	14.8	60	3	56.1	0.56	14.4	4	2	59.3	5
N870306		52.2	24.0	25	5	1.97	15.3	62	3	55.3	0.59	14.8	4	2	59.0	5
N883034		52.8	24.6	22	5	2.04	15.8	64	3	57.2	0.55	16.0	5	3	55.5	4
N883136		56.3	24.4	25	6	1.80	15.1	67	3	54.6	0.53	14.5	5	2	60.0	3
SD3055		55.0	27.5	36	4	1.79	15.5	55	3	57.3	0.50	15.1	5	3	60.5	4
SD3056		55.4	26.9	34	4	1.71	14.9	76	3	59.6	0.55	14.3	5	4	61.4	4
SD3080		58.0	27.4	37	6	1.68	15.2	68	4	57.3	0.49	14.7	5	3	60.0	4
SD8072		56.8	27.8	44	1	1.83	14.6	73	3	61.2	0.54	13.8	5	4	58.6	3
SD8073		54.5	27.0	38	2	1.94	15.0	78	3	60.8	0.59	14.5	5	4	61.1	4
SD8074		54.6	23.8	25	4	1.80	14.4	71	3	59.3	0.55	13.6	5	4	58.6	5
XW398A4		51.8	24.4	15	6	1.98	15.2	51	3	57.6	0.64	14.8	5	2	61.8	4
AC-MINTO		54.0	25.6	28	4	1.93	15.6	71	3	57.4	0.62	15.0	5	2	60.0	3
BW148		55.3	25.4	30	4	1.91	16.4	73	3	58.9	0.62	15.8	5	3	61.8	4
CI982309		47.3	17.6	6	21	2.08	15.0	56	1	56.6	0.62	14.8	5	2	59.3	5
FA987350		50.6	24.2	22	10	1.92	14.9	48	3	55.4	0.60	14.2	5	2	56.9	3
ID0367		50.8	20.8	6	12	1.91	14.1	53	3	58.0	0.59	13.6	5	3	57.6	4

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=SOUTH DAKOTA STATION=BROOKINGS NURSERY=UNIFORM

TABLE 17 (CONT)

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
BUTTE 86	S	61.4	3.50	9	80	85	189	3	3.3	MJ									MI					
CHRIS		60.3	2.75	9	80	85	190	1	2.7	MJ	MI								MJ	MI				
ERA	S	57.3	4.00	9	80	85	193	2	3.0	MJ	MI	MI			MI				MJ					
MARQUIS		55.5	3.50	7	75	90	178	2	3.0	MJ	MI	MI						MI	MJ			MI		
STOA	S	60.5	4.00	9	80	85	187	3	3.3	MJ		MI							MI					
MN87150		56.9	3.00	7	80	85	209	2	2.3	MJ		MI		MJ					MJ					
MN88170		58.6	2.00	7	80	85	186	1	2.7	MJ								MI	MJ	MI				
MN88189		57.6	4.50	9	80	80	203	2	3.0	MJ									MJ				MI	
MN88320		57.3	4.25	9	80	85	206	2	2.7	MJ				MI					MJ					
MN88334		56.5	3.00	9	80	85	184	2	3.0	MJ		MI						MI	MJ					
ND655		59.6	4.00	7	80	80	181	2	3.0	MJ									MJ				MI	
ND657		60.3	3.50	9	80	80	204	2	2.0	MJ				MJ	MJ				MJ				MI	
ND662		56.9	6.50	9	80	85	188	1	2.7	MJ								MI	MJ	MI				
ND671		59.3	3.50	9	80	80	194	2	3.3										MJ				MI	
ND672		55.5	5.75	9	80	85	187	1	2.0	MJ	MI	MI		MJ	MI				MJ	MI				
N87-467		56.5	4.25	9	80	85	194	2	2.3	MJ				MJ	MI				MJ					
N860542		59.3	4.50	9	80	85	194	2	2.3	MJ		MI		MJ					MJ					
N870306		59.0	4.25	9	75	85	212	2	2.3	MJ				MJ	MI				MJ			MI		
N883034		55.5	3.50	9	80	80	192	2	2.7	MJ				MI					MJ				MI	
N883136		60.0	4.25	9	80	85	205	2	2.3	MJ				MJ					MJ					
SD3055		60.5	4.50	9	75	80	206	3	3.0	MJ				MI					MI			MI	MI	
SD3056		61.4	4.25	9	80	80	200	3	3.3	MJ									MI				MI	
SD3080		60.0	5.25	9	75	90	198	2	3.0					MI					MJ			MI		
SD8072		58.6	4.25	9	80	80	180	2	3.0	MJ									MJ				MI	
SD8073		61.1	4.50	9	80	80	192	3	3.3	MJ					MI				MI				MI	
SD8074		58.6	5.75	9	75	85	186	1	2.7	MJ									MJ	MI		MI		
XW398A4		61.8	4.75	9	80	85	198	3	2.7	MJ				MI	MJ				MI					
AC-MINTO		60.0	3.00	9	80	85	191	2	2.3	MJ				MI	MJ				MJ					
BW148		61.8	3.50	9	80	85	193	3	3.0	MJ					MJ				MI					
CI982309		59.3	5.00	9	75	85	195	2	1.7	MJ	MJ	MJ		MI	MJ				MJ			MI		
FA987350		56.9	5.00	9	80	85	200	2	2.3	MJ		MI		MJ	MI				MJ					
ID0367		57.6	5.00	9	85	90	195	2	2.7	MJ	MI	MI		MI	MI				MJ					

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	22.3	8	13.9	58.3	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	75	80	169
MAJOR FAULTING VALUES	56.9	19.3	18	12.9	56.3	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	50	50	159

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=SOUTH DAKOTA STATION=REDFIELD NURSERY=UNIFORM

TABLE 18

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
BUTTE86	S	60.2	29.7	41	3	1.75	13.5	83	3	61.2	0.54	12.1	5	2	57.6	2
CHRIS		57.2	22.9	15	0	1.88	14.5	70	4	59.3	0.56	14.4	5	4	56.9	3
ERA	S	53.8	19.9	6	17	1.99	13.5	74	1	59.2	0.67	12.6	5	2	56.5	3
MARQUIS		54.9	18.7	4	19	1.83	13.8	75	1	57.6	0.65	12.7	5	1	53.5	1
STOA	S	58.5	25.2	19	7	1.81	13.4	78	3	61.5	0.56	12.8	5	3	57.9	3
MN87150		57.4	27.2	22	5	1.74	13.4	67	3	61.7	0.61	13.0	5	3	55.8	2
MN88170		54.9	26.0	18	7	1.76	13.2	67	2	63.6	0.58	12.4	5	2	54.6	2
MN88189		57.0	30.5	39	1	1.89	13.7	60	3	57.4	0.58	13.6	5	3	56.5	3
MN88320		59.0	26.7	26	6	1.86	12.6	74	2	61.7	0.60	11.7	5	2	55.8	1
MN88334		58.2	24.3	17	9	1.74	13.5	71	3	62.0	0.50	12.8	5	3	54.3	1
ND655		60.2	25.6	25	7	1.82	14.0	73	4	60.7	0.56	13.5	5	4	55.8	2
ND657		58.2	28.7	36	2	1.90	15.5	78	4	57.8	0.60	15.5	5	3	60.5	3
ND662		57.4	26.2	20	7	1.88	14.1	72	4	63.4	0.46	13.4	5	4	56.5	4
ND671		60.8	25.2	24	8	1.86	13.8	70	3	59.4	0.48	13.4	5	4	57.3	3
ND672		58.6	22.2	14	12	1.88	13.3	84	3	58.5	0.59	12.0	5	1	55.5	3
N87-467		55.3	24.9	15	10	2.00	13.5	57	2	60.9	0.56	13.3	5	4	57.9	2
N860542		55.2	28.0	26	6	2.02	13.0	64	2	60.9	0.58	12.5	5	3	55.8	2
N870306		56.2	26.9	21	15	2.02	13.8	67	2	60.3	0.56	13.1	5	4	58.2	3
N883034		54.3	23.3	12	10	2.08	14.4	66	3	59.2	0.58	14.6	5	4	57.6	2
N883136		59.8	26.2	31	6	1.81	13.8	74	3	57.1	0.53	13.3	5	3	55.5	2
SD3055		58.6	27.0	29	7	1.91	14.1	63	4	58.3	0.50	13.9	5	3	58.2	2
SD3056		58.1	25.6	26	8	1.84	14.0	87	4	61.5	0.59	13.3	5	4	60.3	3
SD3080		60.5	27.5	28	9	1.72	13.7	71	3	58.0	0.49	13.2	5	3	58.2	3
SD8072		59.5	27.7	37	3	1.93	13.2	83	3	59.9	0.55	12.2	5	2	56.9	2
SD8073		57.9	27.3	33	4	1.77	13.6	85	3	59.8	0.60	12.8	5	3	58.6	2
SD8074		57.8	26.6	30	4	1.86	13.3	84	3	59.0	0.55	12.2	5	2	55.8	2
XW398A4		56.3	27.1	19	7	1.96	13.6	61	2	58.6	0.66	13.4	5	3	57.9	3
AC-MINTO		54.4	22.8	9	11	2.05	14.7	76	3	52.7	0.62	14.3	4	1	55.5	2
BW148		57.0	25.2	23	7	1.91	15.2	85	4	57.3	0.66	15.1	5	2	60.3	4
CI982309		51.3	18.2	4	20	2.21	13.9	56	1	51.5	0.71	13.5	4	1	59.3	4
FA987350		54.9	24.3	18	11	1.97	13.8	59	2	57.6	0.65	13.3	5	2	59.0	2
ID0367		53.0	19.3	4	20	1.97	13.5	64	1	54.2	0.69	12.9	4	1	55.8	2

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=SOUTH DAKOTA STATION=REDFIELD NURSERY=UNIFORM

TABLE 18 (CONT)

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
BUTTE86	S	59.6	3.50	9	80	85	163	2	2.3				MI			MJ		MI	MJ					
CHRIS		56.9	3.50	7	80	90	172	2	3.3	MI									MJ					
ERA	S	56.5	5.00	7	80	85	180	2	1.7	MJ	MI	MJ	MI		MJ	MI			MJ					
MARQUIS		53.5	4.50	5	80	85	166	1	1.0	MJ	MJ	MJ	MI	MI	MJ	MI		MJ	MJ		MI			
STOA	S	57.9	5.00	5	80	85	171	2	2.7				MI			MI			MJ		MI			
MN87150		55.8	3.50	7	90	85	187	2	2.7	MI			MI		MJ			MI	MJ					
MN88170		54.6	2.75	5	80	85	173	1	1.7	MJ			MI		MI	MJ		MI	MJ	MI	MI			
MN88189		56.5	4.50	7	80	85	175	2	2.7	MI			MI	MI	MI				MJ					
MN88320		55.8	3.75	5	80	75	183	1	1.7				MJ		MI	MJ		MJ	MJ		MI			MI
MN88334		54.3	3.25	5	80	85	172	1	2.3			MI	MI			MI		MJ	MJ		MI			
ND655		55.8	4.00	9	80	90	180	2	3.3									MI	MJ					
ND657		60.5	3.50	9	80	85	193	3	3.3					MI	MI				MI					
ND662		56.5	7.25	4	85	85	169	1	3.0	MI									MJ	MI	MJ			
ND671		57.3	4.25	7	80	85	183	2	3.0			MI	MI						MJ					
ND672		55.5	5.50	2	85	85	168	1	1.7		MI	MI	MI	MI	MI	MJ			MJ		MJ			
N87-467		57.9	3.75	5	80	90	180	2	2.7	MJ		MI	MI					MI	MJ		MI			
N860542		57.8	4.75	5	85	90	183	2	2.3	MJ			MI		MI	MI		MI	MJ		MI			
N870306		58.2	4.75	7	90	85	178	2	2.7	MJ		MI	MI						MJ					
N883034		57.6	3.75	9	80	85	194	2	3.0	MJ		MI			MI			MI	MJ					
N883136		55.5	4.75	7	80	85	188	2	2.7				MI	MI				MI	MJ					
SD3055		58.2	4.00	9	80	85	189	2	3.0					MI				MI	MJ					
SD3056		60.3	3.50	7	80	85	179	2	3.3			MI			MI				MJ					
SD3080		58.2	4.50	7	85	85	177	2	2.7			MI	MI	MI					MJ					
SD8072		56.9	3.75	2	70	85	161	1	2.0				MI			MJ		MI	MJ		MJ	MI		
SD8073		58.6	4.00	2	60	90	165	1	2.3	MI			MI		MI	MI		MI	MJ		MJ	MI		
SD8074		55.8	4.50	5	75	90	166	2	2.3	MI			MI			MJ		MI	MJ		MI	MI		
XW398A4		57.9	5.00	9	80	75	183	2	2.3	MJ			MI		MJ				MJ					MI
AC-MINTO		55.5	4.00	5	80	85	181	2	2.0	MJ	MI	MI		MJ	MJ			MI	MJ		MI			
BW148		60.3	3.50	9	80	85	181	2	2.7	MI				MI	MJ				MJ					
CI982309		59.3	5.50	7	80	90	182	2	1.3	MJ	MJ	MJ	MI	MJ	MJ				MJ					
FA987350		59.0	4.25	7	80	85	191	2	2.0	MJ		MI	MI	MI	MJ			MI	MJ					
ID0367		55.8	6.25	9	80	75	188	1	1.0	MJ	MJ	MJ	MI	MJ	MJ	MI		MI	MJ	MI				MI

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	22.8	8	13.9	58.5	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	75	80	150
MAJOR FAULTING VALUES	56.9	19.8	18	12.9	56.5	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	50	50	140

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=SOUTH DAKOTA STATION=SELBY NURSERY=UNIFORM

TABLE 19

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
BUTTE 86	S	61.4	32.3	51	0	1.49	13.6	92	3	62.6	0.42	13.1	5	4	59.6	3
CHRIS		59.4	24.7	20	5	1.59	14.7	71	4	59.8	0.47	14.5	5	4	58.6	3
ERA	S	56.7	23.4	13	11	1.73	13.8	72	2	57.2	0.61	13.0	5	3	55.3	3
MARQUIS		57.4	21.4	7	10	1.68	13.4	75	2	61.0	0.49	12.2	5	2	53.5	2
STOA	S	60.1	28.7	26	3	1.64	14.1	74	4	57.0	0.49	13.3	5	4	57.6	3
MN87150		58.7	30.6	28	2	1.51	13.4	53	3	59.0	0.49	13.0	5	4	56.2	2
MN88170		57.8	29.2	33	4	1.58	13.2	62	3	62.7	0.50	12.5	5	3	57.9	2
MN88189		59.8	35.2	50	2	1.64	13.8	68	3	60.9	0.48	13.9	5	4	56.9	4
MN88320		61.0	29.7	38	3	1.53	13.1	79	3	59.8	0.52	11.9	5	2	53.8	2
MN88334		59.8	26.9	26	6	1.49	13.6	76	3	60.6	0.45	13.3	5	4	55.8	2
ND655		62.0	28.8	38	4	1.59	14.4	78	4	64.4	0.46	14.0	5	4	58.6	4
ND657		60.8	33.4	48	2	1.76	15.5	86	4	61.9	0.50	15.7	5	4	61.1	5
ND662		59.6	29.9	31	4	1.58	15.1	75	4	63.9	0.49	14.1	5	4	55.3	7
ND671		62.6	29.4	33	2	1.51	13.7	76	3	61.7	0.41	13.7	5	4	58.2	5
ND672		59.8	25.2	26	7	1.61	14.2	86	4	58.0	0.54	12.9	5	3	55.0	4
N87-467		58.6	30.1	23	7	1.74	13.5	52	3	59.5	0.52	12.8	5	3	56.9	3
N860542		57.4	30.6	38	4	1.67	13.6	71	3	57.8	0.59	12.8	5	3	56.5	3
N870306		58.3	31.1	29	4	1.55	14.2	72	4	60.9	0.49	13.6	5	4	60.5	5
N883034		58.1	28.6	25	3	1.87	16.1	78	4	58.0	0.53	15.4	5	4	59.6	3
N883136		60.7	29.5	42	2	1.78	14.4	71	4	60.0	0.51	14.3	5	4	58.6	4
SD3055		60.9	31.4	56	1	1.58	14.2	85	4	60.8	0.46	14.4	5	4	59.0	3
SD3056		61.1	33.3	58	2	1.53	14.8	93	4	58.9	0.52	13.7	5	4	58.6	3
SD3080		62.0	31.5	44	3	1.43	14.0	74	4	58.0	0.43	13.4	5	4	57.3	4
SD8072		61.8	33.0	59	2	1.54	14.1	84	4	62.6	0.48	13.4	5	4	57.9	3
SD8073		61.0	32.9	55	1	1.55	14.0	89	4	61.1	0.49	13.3	5	4	59.0	4
SD8074		61.8	31.5	49	1	1.58	14.2	84	4	62.7	0.45	13.7	5	4	58.6	5
XW398A4		58.6	31.0	27	5	1.73	13.8	66	3	54.6	0.62	13.5	4	1	57.6	3
AC-MINTO		58.2	28.4	39	3	1.67	14.9	74	4	54.5	0.54	14.9	5	2	57.3	4
BW148		60.3	29.6	37	4	1.69	15.8	89	4	61.1	0.52	15.3	5	4	60.0	5
CI982309		52.6	21.5	8	15	1.88	14.2	67	2	56.6	0.59	14.3	5	3	60.0	6
FA987350		58.1	28.7	35	4	1.65	13.7	67	3	62.4	0.48	13.0	5	4	56.9	3
ID0367		55.2	22.4	7	15	1.73	13.7	60	1	56.4	0.63	12.9	5	1	55.8	4

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=SOUTH DAKOTA STATION=SELBY NURSERY=UNIFORM

TABLE 19 (CONT)

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
BUTTE 86	S	59.6	3.25	9	80	80	170	2	3.0				MI						MJ				MI	
CHRIS		58.6	3.50	9	80	80	190	2	3.3		MI								MJ				MI	
ERA	S	55.3	5.00	7	80	90	183	2	2.3	MJ	MI	MI	MI		MJ				MJ					
MARQUIS		55.5	4.00	5	80	90	183	2	2.0	MI	MJ	MI	MI			MJ		MI	MJ		MI			
STOA	S	59.6	5.50	7	80	80	182	2	3.3										MJ				MI	
MN87150		56.2	3.50	5	80	90	182	2	3.0				MI					MI	MJ		MI			
MN88170		57.9	2.25	5	80	90	164	1	2.3	MI			MI			MI		MI	MJ	MI	MI			
MN88189		56.9	4.75	9	85	85	181	2	3.0				MI						MJ					
MN88320		53.8	4.75	5	75	85	185	2	2.3				MI			MJ		MI	MJ		MI	MI		
MN88334		55.8	3.50	5	80	85	181	2	3.0				MI					MI	MJ		MI			
ND655		58.6	4.00	7	90	80	180	2	3.3										MJ				MI	
ND657		61.1	4.00	9	80	75	204	3	3.7										MI				MI	
ND662		55.3	9.00	9	80	85	180	1	3.0									MI	MJ	MJ				
ND671		58.2	4.75	9	90	85	181	2	3.0				MI						MJ					
ND672		55.0	7.00	5	80	85	185	1	2.7		MI					MI			MJ	MI	MI			
N87-467		56.9	5.50	7	80	85	178	2	2.7				MI			MI			MJ					
N860542		56.5	6.25	9	80	85	183	1	2.3	MI			MI		MI	MI			MJ	MI				
N870306		60.5	4.50	9	80	85	194	3	3.7										MI					
N883034		59.6	4.00	9	80	80	198	2	3.3										MJ				MI	
N883136		58.6	5.00	9	80	85	183	2	3.3										MJ					
SD3055		59.0	4.00	9	80	80	188	2	3.3										MJ				MI	
SD3056		58.6	4.25	9	80	75	193	2	3.3										MJ				MI	
SD3080		57.3	6.25	9	85	75	175	1	3.0										MJ	MI			MI	
SD8072		57.9	4.00	9	80	85	179	2	3.3										MJ					
SD8073		61.0	5.00	9	80	80	181	3	3.7										MI				MI	
SD8074		58.6	5.00	9	80	90	183	2	3.3										MJ					
XW398A4		57.6	8.00	9	80	85	189	1	1.7				MI	MJ	MJ				MJ	MI				
AC-MINTO		57.3	4.00	9	85	80	180	2	2.7					MJ					MJ				MI	
BW148		60.0	4.00	9	90	80	201	2	3.3										MJ				MI	
CI982309		60.0	6.50	9	80	90	186	1	2.0	MJ	MJ	MI		MI	MI				MJ	MI				
FA987350		56.9	5.00	7	80	90	191	2	3.0				MI						MJ					
ID0367		55.8	6.50	9	80	85	192	1	1.0	MJ	MJ	MI	MI	MI	MJ	MI			MJ	MI				

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	26.0	8	13.9	56.8	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	75	80	157
MAJOR FAULTING VALUES	56.9	23.0	18	12.9	54.8	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	50	50	147

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=MINNESOTA STATION=MORRIS NURSERY=UNIFORM

TABLE 20

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
BUTTE 86	S	54.6	23.1	19	7	1.91	16.0	69	3	55.8	0.56	14.7	5	4	60.3	3
CHRIS		53.1	19.4	11	12	1.85	16.1	63	3	53.1	0.53	15.1	5	4	58.6	3
ERA	S	42.5	14.1	3	32	2.29	16.4	61	2	46.4	0.80	15.8	5	1	60.3	5
MARQUIS		47.6	16.5	6	16	1.97	15.6	50	2	52.6	0.70	14.6	5	3	57.3	3
STOA	S	48.0	17.4	5	18	2.07	16.6	59	2	50.7	0.58	16.1	5	4	60.5	4
SD3055		52.8	22.4	24	6	1.97	16.6	56	3	52.1	0.57	15.8	5	4	57.9	3
SD3056		52.2	23.1	24	7	1.90	16.0	72	3	55.0	0.63	15.1	5	3	59.0	4
SD3080		55.4	23.0	24	6	1.85	15.8	68	3	50.2	0.51	14.5	5	4	58.2	5
SD8072		51.4	20.7	15	8	2.04	16.0	65	3	59.3	0.58	15.3	5	4	55.5	5
SD8073		51.1	21.0	16	6	2.00	15.8	60	3	54.5	0.62	14.9	5	3	61.4	5
SD8074		51.6	20.5	14	8	1.89	15.6	60	3	55.1	0.56	14.5	5	4	60.0	5
MN87150		46.4	17.1	4	23	2.05	15.5	36	2	46.9	0.63	14.4	5	2	57.6	3
MN88170		47.6	19.7	11	13	2.03	15.1	55	3	53.1	0.69	13.9	5	3	60.0	3
MN88189		49.2	21.2	10	12	2.08	15.5	48	3	52.9	0.59	14.5	5	4	60.0	4
MN88320		50.0	19.1	14	12	1.96	15.3	56	3	49.1	0.61	13.9	5	3	60.3	3
MN88334		53.0	18.2	6	18	1.87	15.5	52	2	52.9	0.52	14.3	5	4	59.0	2
ND655		49.1	16.1	7	21	2.18	16.9	59	2	44.5	0.63	16.5	5	1	61.8	4
ND657		47.6	20.2	14	9	2.20	17.3	62	3	50.0	0.69	16.8	5	3	61.1	5
ND662		51.6	21.1	13	13	1.95	16.4	54	3	48.1	0.62	15.0	5	2	57.9	4
ND671		51.6	18.7	10	14	2.08	16.5	57	3	53.4	0.60	15.9	5	4	61.8	5
ND672		49.0	15.6	5	23	2.12	16.5	60	2	50.3	0.69	15.5	5	3	59.3	4
XW398A4		44.5	16.7	7	20	2.36	15.6	37	2	43.8	0.87	14.9	5	1	59.6	3
N86-0542		46.1	18.3	8	20	2.17	15.5	51	2	46.0	0.72	14.8	5	1	59.0	4
N87-0306		47.0	17.2	6	14	2.19	17.0	55	3	50.9	0.69	16.1	5	3	63.1	5
N88-3136		51.0	19.8	15	8	2.06	16.5	55	3	50.2	0.55	15.9	5	4	58.6	3
N88-3034		46.6	19.4	9	9	2.17	17.4	56	3	49.5	0.57	17.5	5	4	61.1	4
N87-467		41.8	16.3	5	23	2.27	15.6	30	2	48.6	0.76	14.6	5	2	60.0	3
FA987-350		45.4	17.7	7	20	2.23	16.4	38	2	44.6	0.63	15.5	5	1	59.6	4
CI982-309		40.7	13.8	4	30	2.32	16.1	37	2	49.3	0.68	15.5	5	3	60.3	5
AC-MINTO		50.5	22.0	30	5	2.01	16.6	65	3	54.7	0.63	15.6	5	3	60.0	4
BW148		52.8	23.0	20	6	2.08	16.6	65	3	55.7	0.52	15.8	5	4	57.3	4
ID0367		44.0	15.2	2	29	2.05	16.0	39	2	39.7	0.67	15.0	5	1	54.3	4

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=MINNESOTA STATION=MORRIS NURSERY=UNIFORM

TABLE 20 (CONT)

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
BUTTE 86	S	60.3	3.25	7	80	85	212	2	3.0	MJ									MJ					
CHRIS		58.6	3.00	7	80	85	210	2	3.0	MJ		MI							MJ					
ERA	S	60.3	3.25	9	80	85	243	2	1.7	MJ	MI	MJ		MJ	MJ				MJ					
MARQUIS		57.3	3.00	5	80	90	216	2	2.3	MJ		MJ			MJ				MJ		MI			
STOA	S	60.5	3.50	5	80	75	217	3	3.0	MJ		MJ			MI				MI		MI		MI	
SD3055		57.9	3.50	9	80	80	235	2	3.0	MJ					MI				MJ				MI	
SD3056		59.0	4.00	9	75	85	222	2	2.7	MJ					MJ				MJ			MI		
SD3080		58.2	5.00	9	80	85	221	2	3.0	MJ									MJ					
SD8072		55.5	4.25	7	80	90	213	2	3.0	MJ		MI			MI				MJ					
SD8073		61.4	4.75	9	75	85	235	3	3.0	MJ					MJ				MI			MI		
SD8074		60.0	5.00	7	75	85	216	2	3.0	MJ		MI							MJ			MI		
MN87150		57.6	3.00	7	75	85	230	2	2.0	MJ		MJ		MI	MJ				MJ			MI		
MN88170		60.0	2.25	5	75	90	217	1	2.3	MJ		MI			MJ				MJ	MI	MI	MI		
MN88189		60.0	3.25	9	75	85	238	2	3.0	MJ		MI			MI				MJ			MI		
MN88320		60.3	3.75	7	80	75	225	2	2.7	MJ		MI			MJ				MJ				MI	
MN88334		59.0	2.75	5	75	85	202	1	2.3	MJ		MJ					MI		MJ	MI	MI	MI		MI
ND655		61.8	3.25	9	75	85	258	3	2.0	MJ		MJ		MJ	MJ				MI			MI		
ND657		61.1	3.75	9	75	85	257	3	3.0	MJ		MI			MJ				MI			MI		
ND662		57.9	7.00	9	80	85	212	1	2.0	MJ		MI		MI	MJ				MJ	MI				
ND671		61.8	3.25	5	80	80	228	3	3.3	MJ		MI			MI				MI		MI		MI	
ND672		59.3	4.50	5	75	85	226	2	2.3	MJ	MI	MJ			MJ				MJ		MI	MI		
XW398A4		59.6	4.00	5	75	80	238	2	1.7	MJ		MJ		MJ	MJ				MJ		MI	MI	MI	
N86-0542		59.0	4.00	5	70	85	235	2	1.7	MJ		MJ		MJ	MJ				MJ		MI	MI		
N87-0306		63.1	3.75	9	80	80	261	4	3.3	MJ		MI			MJ								MI	
N88-3136		58.6	4.00	9	75	80	246	2	3.0	MJ		MI							MJ			MI	MI	
N88-3034		61.1	3.25	9	75	80	253	3	3.3	MJ		MI			MI				MI			MI	MI	
N87-467		60.0	3.75	2	60	70	224	1	1.7	MJ		MJ		MI	MJ				MJ		MJ	MI	MI	
FA987-350		59.6	4.00	5	75	85	236	2	1.7	MJ		MJ		MJ	MJ				MJ		MI	MI		
CI982-309		60.3	4.50	2	70	80	227	1	2.0	MJ	MI	MJ			MJ				MJ		MJ	MI	MI	
AC-MINTO		60.0	2.75	7	80	80	223	1	2.3	MJ					MJ				MJ	MI			MI	
BW148		57.3	3.25	7	75	85	223	2	3.0	MJ									MJ			MI		
ID0367		54.3	5.25	5	75	85	212	2	1.7	MJ	MI	MJ		MJ	MJ				MJ		MI	MI		

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	16.1	8	13.9	48.9	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	75	80	203
MAJOR FAULTING VALUES	56.9	13.1	18	12.9	46.9	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	50	50	193

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=MINNESOTA STATION=ST. PAUL NURSERY=UNIFORM

TABLE 21

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
BUTTE 86	S	54.3	23.7	17	5	2.10	15.4	55	3	55.2	0.63	14.8	5	3	56.9	4
CHRIS		53.8	22.1	17	8	2.23	16.1	70	3	57.5	0.70	16.9	5	3	60.8	4
ERA	S	54.1	23.5	23	7	2.07	16.5	72	3	54.0	0.55	15.6	5	4	60.3	4
MARQUIS		53.8	22.4	15	8	2.06	14.5	61	3	54.2	0.65	13.1	5	3	53.8	2
STOA	S	54.9	29.8	46	0	2.08	16.3	72	3	53.2	0.59	14.8	5	4	57.6	2
SD3055		56.5	28.8	52	1	2.00	16.4	64	3	59.5	0.52	16.3	5	4	58.6	2
SD3056		55.7	29.8	56	1	2.03	16.2	77	3	56.8	0.61	15.1	5	3	57.9	2
SD3080		57.0	28.6	43	1	1.94	16.2	70	4	57.5	0.53	15.7	5	4	57.9	3
SD8072		56.2	30.1	53	1	2.06	16.3	78	3	61.1	0.54	15.7	5	4	57.6	2
SD8073		55.4	29.5	48	1	2.02	15.7	69	3	58.6	0.61	14.7	5	3	59.3	3
SD8074		55.8	27.3	39	1	1.96	15.9	71	3	55.7	0.59	14.3	5	4	56.9	3
MN87150		55.2	27.2	33	4	1.84	14.6	61	3	57.3	0.53	13.7	5	4	54.3	2
MN88170		54.0	28.0	39	2	1.99	14.4	58	3	64.7	0.55	12.9	5	3	58.2	2
MN88189		55.0	32.8	57	1	1.83	14.8	58	3	57.9	0.48	13.8	5	4	56.9	2
MN88320		56.4	28.2	49	4	1.85	14.2	64	3	56.9	0.50	12.5	5	3	59.3	2
MN88334		57.6	24.9	25	4	1.82	14.5	59	4	57.0	0.49	13.6	5	4	53.8	1
ND655		57.2	25.4	32	5	2.05	15.9	66	4	61.6	0.50	15.4	5	4	59.0	3
ND657		55.1	28.7	42	0	2.07	16.6	72	3	58.8	0.54	16.2	5	4	60.8	3
ND662		55.5	27.8	36	2	1.98	16.1	67	3	59.7	0.43	15.4	5	4	58.6	4
ND671		57.4	27.1	32	2	1.97	16.3	64	4	59.5	0.46	16.1	5	4	61.1	4
ND672		57.0	25.2	33	5	2.04	15.6	72	4	54.2	0.56	13.9	5	4	58.2	3
XW398A4		55.6	28.7	31	1	2.08	14.3	61	3	50.7	0.65	13.3	5	2	55.5	2
N86-0542		55.4	28.7	38	2	2.02	13.9	52	2	59.7	0.49	12.8	5	3	57.3	3
N87-0306		56.1	28.4	38	3	1.98	15.2	73	3	61.3	0.49	14.2	5	4	59.3	3
N88-3136		56.2	26.3	40	2	2.03	15.8	61	3	57.5	0.49	15.2	5	4	59.3	3
N88-3034		52.9	23.6	20	4	2.09	16.6	58	3	58.8	0.49	17.0	5	4	62.5	4
N87-467		54.6	27.4	34	3	1.95	14.1	55	3	59.4	0.52	12.7	5	3	56.2	2
FA987-350		53.8	26.0	34	5	2.06	15.1	55	3	52.6	0.57	14.2	5	4	56.5	2
CI982-309		51.9	22.7	12	10	2.08	14.9	57	3	55.0	0.62	14.2	5	3	57.3	4
AC-MINTO		53.0	25.4	32	4	2.17	17.1	65	3	55.9	0.73	16.9	5	3	61.8	3
BW148		55.5	27.7	38	1	2.13	17.4	72	3	54.9	0.62	16.6	5	3	62.1	2
ID0367		51.8	21.1	11	12	2.00	14.7	49	3	61.5	0.64	14.1	5	3	58.6	4

TABLE 21 (CONT)

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=MINNESOTA STATION=ST. PAUL NURSERY=UNIFORM

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
BUTTE 86	S	56.9	3.25	7	80	75	188	2	2.7	MJ					MJ				MJ				MI	
CHRIS		60.8	2.50	9	80	80	198	2	2.7	MJ	MI	MI			MJ				MI	MI			MI	
ERA	S	60.3	4.00	9	85	80	188	2	3.0	MJ	MI								MJ				MI	
MARQUIS		53.8	5.00	7	80	75	185	2	2.7	MJ	MI	MI			MJ			MI	MJ				MI	
STOA	S	57.6	3.00	7	80	85	178	2	3.0	MJ					MI			MI	MJ					
SD3055		58.6	3.25	9	75	80	205	2	3.0	MJ								MI	MJ			MI	MI	
SD3056		57.9	3.25	9	75	85	196	2	2.7	MJ					MJ			MI	MJ			MI		
SD3080		57.9	4.25	9	80	70	193	2	3.3	MI									MJ				MI	
SD8072		57.6	3.50	9	85	85	192	2	3.0	MJ								MI	MJ					
SD8073		59.3	3.50	7	80	85	185	2	2.7	MJ					MJ				MJ					
SD8074		56.9	3.00	7	75	85	178	2	3.0	MJ					MI				MJ			MI		
MN87150		54.3	2.75	7	80	80	186	1	2.7	MJ								MI	MJ	MI			MI	
MN88170		58.2	2.00	2	80	80	175	1	2.3	MJ						MI		MI	MJ	MI	MJ		MI	
MN88189		56.9	3.25	7	85	80	188	2	3.0	MJ								MI	MJ				MI	
MN88320		59.3	3.00	7	80	85	190	2	2.7	MJ						MI		MI	MJ					
MN88334		53.8	3.00	2	85	85	170	1	3.0	MI								MJ	MJ		MJ			
ND655		59.0	3.50	9	85	75	193	2	3.3	MI									MJ				MI	
ND657		60.8	2.75	9	80	70	193	2	3.0	MJ									MI	MI			MI	
ND662		58.6	5.00	7	80	75	182	2	3.0	MJ									MJ				MI	
ND671		61.1	3.25	9	80	75	193	3	3.7	MI									MI				MI	
ND672		58.2	5.00	7	80	85	185	2	3.3	MI									MJ					
XW398A4		55.5	5.75	7	80	85	188	1	2.0	MJ				MI	MJ			MI	MJ	MI				
N86-0542		57.3	4.00	7	70	85	188	2	2.3	MJ			MI			MI			MJ			MI		
N87-0306		59.3	4.00	9	85	75	194	2	3.0	MJ									MJ				MI	
N88-3136		59.3	3.50	7	75	80	190	2	3.0	MJ									MJ			MI	MI	
N88-3034		62.5	3.00	9	70	70	202	4	3.7	MJ												MI	MI	
N87-467		56.2	4.00	5	85	90	200	2	2.7	MJ						MI		MI	MJ		MI			
FA987-350		56.5	5.00	5	85	85	193	2	3.0	MJ					MI			MI	MJ		MI			
CI982-309		57.3	5.75	5	75	85	198	1	2.3	MJ	MI	MI			MJ				MJ	MI	MI	MI		
AC-MINTO		61.8	2.50	9	70	80	210	2	2.7	MJ					MJ				MI	MI		MI	MI	
BW148		62.1	2.75	7	80	80	180	3	3.0	MJ					MJ			MI		MI			MI	
ID0367		58.6	5.00	9	80	85	198	2	2.7	MJ	MI	MI			MJ				MJ					

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	23.6	8	13.9	52.0	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	75	80	164
MAJOR FAULTING VALUES	56.9	20.6	18	12.9	50.0	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	50	50	154

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

TABLE 22

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=WISCONSIN STATION=MADISON NURSERY=UNIFORM

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
BUTTE 86	S	55.3	24.8	23	10	1.87	16.3	70	3	52.1	0.55	15.2	5	4	62.5	3
CHRIS		55.5	19.4	8	12	1.87	16.3	71	3	53.1	0.58	16.1	5	4	60.0	3
ERA	S	55.6	21.6	10	11	1.92	15.8	65	3	56.7	0.55	14.8	5	4	57.6	4
MARQUIS		54.7	19.4	5	20	1.96	16.2	62	2	51.0	0.62	14.8	5	2	58.6	3
STOA	S	57.0	22.6	12	10	1.76	15.4	71	4	53.1	0.50	14.2	5	4	60.0	4
SD 3055		58.6	25.6	26	5	1.84	16.6	60	4	54.1	0.54	16.0	5	4	60.5	4
SD 3056		57.8	27.3	37	4	1.80	16.0	80	4	55.0	0.59	14.7	5	4	61.8	3
SD 3080		58.4	25.2	21	7	1.87	16.8	78	4	55.1	0.53	16.4	5	4	64.0	6
SD 8072		56.8	24.8	26	3	1.87	16.3	75	3	51.6	0.60	15.2	5	3	59.6	3
SD 8073		56.2	24.3	25	3	1.90	15.9	76	3	52.1	0.60	14.6	5	4	62.5	4
SD 8074		55.6	21.8	15	6	1.85	15.6	70	3	54.5	0.57	14.6	5	4	61.8	6
MN 87150		55.7	24.3	18	5	1.86	15.3	56	3	53.1	0.53	14.2	5	4	57.9	2
MN 88170		53.8	22.7	17	5	1.86	14.9	55	3	58.7	0.57	13.6	5	4	60.0	2
MN 88189		55.4	27.6	40	2	1.84	15.7	61	3	54.0	0.55	14.4	5	4	58.6	3
MN 88320		54.4	22.2	26	10	1.89	15.2	64	3	51.9	0.60	13.6	5	4	58.6	2
MN 88334		56.4	20.1	9	14	1.74	15.6	71	3	57.9	0.49	14.3	5	4	56.9	2
ND 655		57.4	19.9	12	14	1.88	15.6	65	4	55.7	0.56	14.9	5	4	59.3	3
ND 657		57.2	26.2	31	4	1.94	17.1	73	4	47.4	0.60	16.0	5	2	60.0	3
ND 662		55.6	21.6	8	8	1.87	16.3	71	3	54.3	0.59	15.4	5	4	57.3	5
ND 671		56.9	20.7	16	8	1.95	16.6	61	3	55.3	0.52	16.4	5	4	64.0	5
ND 672		57.3	21.3	16	8	1.86	16.0	75	4	51.6	0.55	14.2	5	3	58.6	4
XW 398A4		57.5	26.0	23	4	1.95	15.8	55	4	53.3	0.61	15.1	5	3	59.0	3
N86-0542		55.1	23.8	15	8	1.98	15.2	58	3	57.3	0.50	14.3	5	4	61.1	4
N87-0306		55.7	24.6	27	4	1.88	16.1	58	3	53.7	0.56	15.2	5	4	62.7	5
N88-3136		58.6	24.9	32	2	1.82	15.5	62	4	57.6	0.55	14.4	5	4	59.3	2
N88-3034		53.4	21.4	8	9	2.03	16.6	68	3	55.7	0.59	16.2	5	4	60.3	2
N87-467		54.6	22.9	15	9	1.92	15.3	48	3	55.0	0.61	14.5	5	3	59.3	3
FA987-350		49.5	18.0	10	21	2.13	16.4	52	2	47.1	0.67	15.6	5	1	59.6	3
CI982-309		54.3	21.0	7	13	2.00	17.0	60	3	53.8	0.61	16.7	5	3	61.8	7
AC MINTO		53.8	21.0	13	6	1.96	17.2	69	3	47.2	0.63	16.6	5	1	60.0	4
BW 148		56.6	23.1	17	3	1.98	16.9	76	3	53.8	0.66	16.2	5	3	62.5	4
ID 0367		53.8	18.0	2	23	1.88	15.1	61	2	56.7	0.62	13.7	5	3	56.5	3

TABLE 22 (CONT)

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=WISCONSIN STATION=MADISON NURSERY=UNIFORM

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
BUTTE 86	S	62.5	3.00	7	85	85	199	4	3.7	MJ		MI												
CHRIS		60.0	3.25	9	80	80	203	2	3.0	MJ	MI	MI			MI				MJ				MI	
ERA	S	57.6	4.75	9	80	85	210	2	3.0	MJ		MI							MJ					
MARQUIS		58.6	4.25	9	80	85	207	2	2.0	MJ	MI	MJ		MI	MJ				MJ					
STOA	S	60.0	5.50	9	80	85	191	2	3.3	MI		MI							MJ					
SD 3055		60.5	4.25	9	85	75	227	3	3.7										MI				MI	
SD 3056		61.8	4.25	7	80	80	214	3	3.7	MI					MI				MI				MI	
SD 3080		64.0	5.50	9	80	90	225	4	4.0															
SD 8072		59.6	4.50	9	80	85	206	2	2.7	MJ				MI	MI				MJ					
SD 8073		62.5	4.50	9	85	75	208	4	3.7	MJ					MI								MI	
SD 8074		61.8	6.00	9	75	80	203	2	3.0	MJ					MI				MI	MI		MI	MI	
MN 87150		57.9	3.50	9	80	85	206	2	3.0	MJ								MI	MJ					
MN 88170		60.0	2.50	5	80	80	182	1	2.7	MJ					MI			MI	MJ	MI	MI		MI	
MN 88189		58.6	4.75	9	80	85	211	2	3.0	MJ									MJ					
MN 88320		58.6	4.50	9	75	85	201	2	3.0	MJ		MI			MI			MI	MJ			MI		
MN 88334		56.9	4.75	9	75	90	186	2	3.0	MJ	MI	MI						MI	MJ			MI		
ND 655		59.3	5.00	9	80	85	218	2	3.3	MI	MI	MI							MJ					
ND 657		60.0	4.50	9	85	85	190	2	2.7	MI				MJ	MI				MJ					
ND 662		57.3	8.25	9	85	80	216	1	2.7	MJ		MI			MI				MJ	MJ			MI	
ND 671		64.0	4.75	7	80	85	207	4	3.7	MJ	MI	MI												
ND 672		58.6	6.50	9	90	85	204	1	2.7	MI		MI		MI					MJ	MI				
XW 398A4		59.0	7.50	9	80	85	205	1	2.7	MI					MJ				MJ	MI				
N86-0542		61.1	5.75	9	75	85	195	2	3.0	MJ		MI							MI	MI		MI		
N87-0306		62.7	6.50	9	90	85	210	3	3.3	MJ										MI				
N88-3136		59.3	4.00	9	80	85	213	2	3.3									MI	MJ					
N88-3034		60.3	3.75	9	80	90	205	2	3.0	MJ		MI			MI			MI	MJ					
N87-467		59.3	6.50	9	85	85	205	1	2.3	MJ		MI			MJ				MJ	MI				
FA987-350		59.6	4.75	9	80	85	216	2	1.7	MJ	MI	MJ		MJ	MJ				MJ					
CI982-309		61.8	6.00	9	80	75	224	2	2.7	MJ		MI			MJ			MI	MI	MI			MI	
AC MINTO		60.0	3.25	9	80	85	197	2	2.0	MJ				MJ	MJ				MJ					
BW 148		62.5	3.25	7	85	80	197	4	3.3	MJ					MJ								MI	
ID 0367		56.5	6.50	7	80	80	198	1	2.0	MJ	MI	MJ			MJ				MJ	MI			MI	

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	20.9	8	13.9	51.9	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	75	80	179
MAJOR FAULTING VALUES	56.9	17.9	18	12.9	49.9	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	50	50	169

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

SOUTHEAST REGION

TABLE 23

VARIETY=AC-MINTO

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	53.9833333	2.4935249	50.5000000	58.2000000	6.2176667	4.6190644
K_WT	24.2000000	2.7597101	21.0000000	28.4000000	7.6160000	11.4037609
LG	25.1666667	11.6518954	9.0000000	39.0000000	135.7666667	46.2989222
SM	5.5000000	2.8809721	3.0000000	11.0000000	8.3000000	52.3813101
WHT_ASH	1.9650000	0.1670629	1.6700000	2.1700000	0.0279100	8.5019268
WHT_PRO	16.0166667	1.1016654	14.7000000	17.2000000	1.2136667	6.8782439
HARD	70.0000000	4.5607017	65.0000000	76.0000000	20.8000000	6.5152881
EXTR	53.7333333	3.5612732	47.2000000	57.4000000	12.6826667	6.6276796
FL_ASH	0.6283333	0.0604704	0.5400000	0.7300000	0.0036567	9.6239329
FL_PRO	15.5500000	1.0212737	14.3000000	16.9000000	1.0430000	6.5676766
MIXO	3.3333333	0.8164966	2.0000000	4.0000000	0.6666667	24.4948974
BAKE_ABS	59.1000000	2.2768399	55.5000000	61.8000000	5.1840000	3.8525210
LOAF_VOL	197.0000000	16.8878655	180.0000000	223.0000000	285.2000000	8.5725205

VARIETY=BUTTE 86

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	57.0666667	3.0223611	54.3000000	61.4000000	9.1346667	5.2961935
K_WT	27.1666667	3.7924486	23.1000000	32.3000000	14.3826667	13.9599336
LG	31.6666667	13.8948432	17.0000000	51.0000000	193.0666667	43.8784521
SM	4.5000000	3.6193922	0	10.0000000	13.1000000	80.4309381
WHT_ASH	1.8066667	0.2057831	1.4900000	2.1000000	0.0423467	11.3902061
WHT_PRO	15.0000000	1.1916375	13.5000000	16.3000000	1.4200000	7.9442502
HARD	74.0000000	12.7121989	55.0000000	92.0000000	161.6000000	17.1786471
EXTR	57.7500000	4.0267853	52.1000000	62.6000000	16.2150000	6.9727884
FL_ASH	0.5366667	0.0683130	0.4200000	0.6300000	0.0046667	12.7291314
FL_PRO	14.0333333	1.1893976	12.1000000	15.2000000	1.4146667	8.4755174
MIXO	3.3333333	1.0327956	2.0000000	5.0000000	1.0666667	30.9838668
BAKE_ABS	60.0500000	1.9086645	56.9000000	62.5000000	3.6430000	3.1784587
LOAF_VOL	186.8333333	18.1043273	163.0000000	212.0000000	327.7666667	9.6900949

VARIETY=BW148

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	56.2500000	2.4679951	52.8000000	60.3000000	6.0910000	4.3875469
K_WT	25.6666667	2.5920391	23.0000000	29.6000000	6.7186667	10.0988536
LG	27.5000000	8.8713020	17.0000000	38.0000000	78.7000000	32.2592802
SM	4.1666667	2.1369761	1.0000000	7.0000000	4.5666667	51.2874254
WHT_ASH	1.9500000	0.1555635	1.6900000	2.1300000	0.0242000	7.9776150
WHT_PRO	16.3833333	0.7859177	15.2000000	17.4000000	0.6176667	4.7970563
HARD	76.6666667	8.8694231	65.0000000	89.0000000	78.6666667	11.5688128
EXTR	56.9500000	2.7142218	53.8000000	61.1000000	7.3670000	4.7659733
FL_ASH	0.6000000	0.0644981	0.5200000	0.6600000	0.0041600	10.7496770
FL_PRO	15.8000000	0.5549775	15.1000000	16.6000000	0.3080000	3.5125157
MIXO	3.8333333	0.9831921	2.0000000	5.0000000	0.9666667	25.6484891
BAKE ABS	60.6666667	1.9294213	57.3000000	62.5000000	3.7226667	3.1803648
LOAF VOL	195.8333333	15.7786776	180.0000000	223.0000000	248.9666667	8.0571971

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

TABLE 24 SOUTHEAST REGION

VARIETY=CHRIS

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	55.6500000	2.3227139	53.1000000	59.4000000	5.3950000	4.1737896
K_WT	21.7166667	2.0585594	19.4000000	24.7000000	4.2376667	9.4791682
LG	15.0000000	4.6904158	8.0000000	20.0000000	22.0000000	31.2694384
SM	6.8333333	4.7504386	0	12.0000000	22.5666667	69.5186133
WHT_ASH	1.8800000	0.2039608	1.5900000	2.2300000	0.0416000	10.8489777
WHT_PRO	15.5000000	0.7797435	14.5000000	16.3000000	0.6080000	5.0306035
HARD	68.6666667	3.1411251	63.0000000	71.0000000	9.8666667	4.5744540
EXTR	57.5000000	3.7239764	53.1000000	62.2000000	13.8680000	6.4764806
FL_ASH	0.5583333	0.0793515	0.4700000	0.7000000	0.0062967	14.2122159
FL_PRO	15.4166667	0.9641922	14.4000000	16.9000000	0.9296667	6.2542199
MIXO	3.3333333	0.5163978	3.0000000	4.0000000	0.2666667	15.4919334
BAKE_ABS	59.2000000	1.4436066	56.9000000	60.8000000	2.0840000	2.4385247
LOAF_VOL	193.8333333	13.1820585	172.0000000	210.0000000	173.7666667	6.8007181

VARIETY=CI982309

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	49.6833333	4.9745017	40.7000000	54.3000000	24.7456667	10.0124153
K_WT	19.1333333	3.2702701	13.8000000	22.7000000	10.6946667	17.0920041
LG	6.8333333	2.9944393	4.0000000	12.0000000	8.9666667	43.8210628
SM	18.1666667	7.1390942	10.0000000	30.0000000	50.9666667	39.2977665
WHT_ASH	2.0950000	0.1546286	1.8800000	2.3200000	0.0239100	7.3808395
WHT_PRO	15.1833333	1.1720353	13.9000000	17.0000000	1.3736667	7.7192224
HARD	55.5000000	9.9749687	37.0000000	67.0000000	99.5000000	17.9729165
EXTR	53.8000000	2.9209587	49.3000000	56.6000000	8.5320000	5.4292914
FL_ASH	0.6383333	0.0462241	0.5900000	0.7100000	0.0021367	7.2413721
FL_PRO	14.8333333	1.1307814	13.5000000	16.7000000	1.2786667	7.6232457
MIXO	5.1666667	1.1690452	4.0000000	7.0000000	1.3666667	22.6266812
BAKE_ABS	59.6666667	1.4787382	57.3000000	61.8000000	2.1866667	2.4783322
LOAF_VOL	202.0000000	19.1311265	182.0000000	227.0000000	366.0000000	9.4708547

VARIETY=ERA

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	52.6166667	5.1316339	42.5000000	56.7000000	26.3336667	9.7528678
K_WT	20.5500000	3.4645346	14.1000000	23.5000000	12.0030000	16.8590492
LG	10.6666667	6.9474216	3.0000000	23.0000000	48.2666667	65.1320774
SM	15.3333333	8.8242091	7.0000000	32.0000000	77.8666667	57.5491899
WHT_ASH	1.9933333	0.1842462	1.7300000	2.2900000	0.0339467	9.2431210
WHT_PRO	15.1500000	1.2973049	13.5000000	16.5000000	1.6830000	8.5630686
HARD	68.6666667	4.9665548	61.0000000	74.0000000	24.6666667	7.2328468
EXTR	55.5000000	4.8801639	46.4000000	59.5000000	23.8160000	8.7930882
FL_ASH	0.6250000	0.0971082	0.5500000	0.8000000	0.0094300	15.5373099
FL_PRO	14.3000000	1.3311649	12.6000000	15.8000000	1.7720000	9.3088455
MIXO	3.8333333	0.7527727	3.0000000	5.0000000	0.5666667	19.6375475
BAKE_ABS	57.8833333	2.0341255	55.3000000	60.3000000	4.1376667	3.5141817
LOAF_VOL	199.5000000	23.7886528	180.0000000	243.0000000	565.9000000	11.9241367

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

TABLE 25 SOUTHEAST REGION

VARIETY=FA987350

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	52.0500000	4.4858667	45.4000000	58.1000000	20.1230000	8.6183798
K_WT	23.1500000	4.4175785	17.7000000	28.7000000	19.5150000	19.0824126
LG	21.0000000	11.7643529	7.0000000	35.0000000	138.4000000	56.0207283
SM	11.8333333	7.2502874	4.0000000	21.0000000	52.5666667	61.2700339
WHT_ASH	1.9933333	0.2014613	1.6500000	2.2300000	0.0405867	10.1067556
WHT_PRO	15.0500000	1.1878552	13.7000000	16.4000000	1.4110000	7.8927256
HARD	53.1666667	9.8674549	38.0000000	67.0000000	97.3666667	18.5594763
EXTR	53.2833333	6.6381975	44.6000000	62.4000000	44.0656667	12.4583001
FL_ASH	0.6000000	0.0687023	0.4800000	0.6700000	0.0047200	11.4503760
FL_PRO	14.3000000	1.0807405	13.0000000	15.6000000	1.1680000	7.5576258
MIXO	2.8333333	0.7527727	2.0000000	4.0000000	0.5666667	26.5684466
BAKE_ABS	58.0833333	1.4661742	56.5000000	59.6000000	2.1496667	2.5242597
LOAF_VOL	204.5000000	18.1190507	191.0000000	236.0000000	328.3000000	8.8601715

VARIETY=ID367

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	51.4333333	3.9505274	44.0000000	55.2000000	15.6066667	7.6808698
K_WT	19.4666667	2.5858590	15.2000000	22.4000000	6.6866667	13.2835222
LG	5.3333333	3.4448028	2.0000000	11.0000000	11.8666667	64.5900534
SM	18.5000000	6.7749539	12.0000000	29.0000000	45.9000000	36.6213723
WHT_ASH	1.9233333	0.1127239	1.7300000	2.0500000	0.0127067	5.8608588
WHT_PRO	14.5166667	0.9432214	13.5000000	16.0000000	0.8896667	6.4975070
HARD	54.3333333	9.3309521	39.0000000	64.0000000	87.0666667	17.1735314
EXTR	54.4166667	7.5998465	39.7000000	61.5000000	57.7576667	13.9660272
FL_ASH	0.6400000	0.0357771	0.5900000	0.6900000	0.0012800	5.5901699
FL_PRO	13.7000000	0.7924645	12.9000000	15.0000000	0.6280000	5.7844125
MIXO	3.5000000	0.8366600	2.0000000	4.0000000	0.7000000	23.9045722
BAKE_ABS	56.4333333	1.5108497	54.3000000	58.6000000	2.2826667	2.6772292
LOAF_VOL	197.1666667	8.2077199	188.0000000	212.0000000	67.3666667	4.1628334

VARIETY=MAROUIS

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	53.5166667	3.2908459	47.6000000	57.4000000	10.8296667	6.1491982
K_WT	19.7000000	2.0746084	16.5000000	22.4000000	4.3040000	10.5310071
LG	7.5000000	3.9370039	4.0000000	15.0000000	15.5000000	52.4933858
SM	14.0000000	5.0199602	8.0000000	20.0000000	25.2000000	35.8568583
WHT_ASH	1.8700000	0.1512614	1.6800000	2.0600000	0.0228800	8.0888430
WHT_PRO	14.6166667	1.0778064	13.4000000	16.2000000	1.1616667	7.3738181
HARD	65.3333333	9.6471066	50.0000000	75.0000000	93.0666667	14.7659796
EXTR	56.3166667	4.4047323	51.0000000	61.5000000	19.4016667	7.8213654
FL_ASH	0.6116667	0.0752108	0.4900000	0.7000000	0.0056567	12.2960460
FL_PRO	13.4666667	1.0385888	12.2000000	14.8000000	1.0786667	7.7122930
MIXO	2.1666667	0.7527727	1.0000000	3.0000000	0.5666667	34.7433532
BAKE_ABS	55.7000000	1.9748418	53.5000000	58.6000000	3.9000000	3.5454969
LOAF_VOL	189.1666667	18.7341044	166.0000000	216.0000000	350.9666667	9.9034913

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

TABLE 26 SOUTHEAST REGION

VARIETY=MN87150

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	54.4166667	4.3705454	46.4000000	58.7000000	19.1016667	8.0316300
K_WT	25.1666667	4.5592397	17.1000000	30.6000000	20.7866667	18.1161842
LG	20.0000000	10.2176318	4.0000000	33.0000000	104.4000000	51.0881591
SM	7.8333333	7.6789756	2.0000000	23.0000000	58.9666667	98.0294761
WHT_ASH	1.7933333	0.1770499	1.5100000	2.0500000	0.0313467	9.8726709
WHT_PRO	14.4833333	0.9064583	13.4000000	15.5000000	0.8216667	6.2586304
HARD	54.8333333	10.4578519	36.0000000	67.0000000	109.3666667	19.0720704
EXTR	55.5000000	5.1749396	46.9000000	61.7000000	26.7800000	9.3242155
FL_ASH	0.5566667	0.0531664	0.4900000	0.6300000	0.0028267	9.5508513
FL_PRO	13.7833333	0.6585337	13.0000000	14.4000000	0.4336667	4.7777537
MIXO	2.3333333	0.5163978	2.0000000	3.0000000	0.2666667	22.1313334
BAKE_ABS	56.4500000	1.3217413	54.3000000	57.9000000	1.7470000	2.3414372
LOAF_VOL	200.0000000	18.4715998	182.0000000	230.0000000	341.2000000	9.2357999

VARIETY=MN88170

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	53.4833333	3.3492785	47.6000000	57.8000000	11.2176667	6.2622846
K_WT	25.1500000	3.4921340	19.7000000	29.2000000	12.1950000	13.8852247
LG	24.5000000	10.8027774	11.0000000	39.0000000	116.7000000	44.0929691
SM	5.8333333	3.8686776	2.0000000	13.0000000	14.9666667	66.3201881
WHT_ASH	1.8450000	0.1630644	1.5800000	2.0300000	0.0265900	8.8381791
WHT_PRO	14.1500000	0.8167007	13.2000000	15.1000000	0.6670000	5.7717363
HARD	58.5000000	5.0892043	54.0000000	67.0000000	25.9000000	8.6994945
EXTR	60.2000000	4.3349740	53.1000000	64.7000000	18.7920000	7.2009536
FL_ASH	0.5733333	0.0634560	0.5000000	0.6900000	0.0040267	11.0679107
FL_PRO	13.0500000	0.5958188	12.4000000	13.9000000	0.3550000	4.5656610
MIXO	2.1666667	0.4082483	2.0000000	3.0000000	0.1666667	18.8422288
BAKE_ABS	58.2166667	1.9843555	54.6000000	60.0000000	3.9376667	3.4085694
LOAF_VOL	182.8333333	18.3893085	164.0000000	217.0000000	338.1666667	10.0579627

VARIETY=MN88189

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	55.2333333	3.4788887	49.2000000	59.8000000	12.1026667	6.2985312
K_WT	29.2666667	4.8578459	21.2000000	35.2000000	23.5986667	16.5985623
LG	39.1666667	16.0426515	10.0000000	57.0000000	257.3666667	40.9599612
SM	3.3333333	4.2739521	1.0000000	12.0000000	18.2666667	128.2185634
WHT_ASH	1.8533333	0.1408072	1.6400000	2.0800000	0.0198267	7.5975106
WHT_PRO	14.6833333	0.8328665	13.7000000	15.7000000	0.6936667	5.6721898
HARD	58.0000000	6.8992753	48.0000000	68.0000000	47.6000000	11.8953023
EXTR	56.9166667	2.9633877	52.9000000	60.9000000	8.7816667	5.2065377
FL_ASH	0.5250000	0.0546809	0.4700000	0.5900000	0.0029900	10.4154081
FL_PRO	14.0000000	0.3633180	13.6000000	14.5000000	0.1320000	2.5951289
MIXO	3.3333333	0.8164966	2.0000000	4.0000000	0.6666667	24.4948974
BAKE_ABS	57.7500000	1.3277801	56.5000000	60.0000000	1.7630000	2.2991863
LOAF_VOL	199.3333333	23.2436371	175.0000000	238.0000000	540.2666667	11.6606875

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

TABLE 27 SOUTHEAST REGION

VARIETY=MN88320

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	56.1500000	3.8103806	50.0000000	61.0000000	14.5190000	6.7860740
K_WT	25.1333333	3.9439405	19.1000000	29.7000000	15.5546667	15.6920710
LG	30.3333333	11.9443152	14.0000000	49.0000000	142.6666667	39.3768634
SM	6.8333333	3.4880749	3.0000000	12.0000000	12.1666667	51.0449989
WHT_ASH	1.8100000	0.1503330	1.5300000	1.9600000	0.0226000	8.3056886
WHT_PRO	14.1000000	1.0881176	12.6000000	15.3000000	1.1840000	7.7171464
HARD	66.1666667	8.6813977	56.0000000	79.0000000	75.3666667	13.1205004
EXTR	56.0000000	4.7438381	49.1000000	61.7000000	22.5040000	8.4711395
FL_ASH	0.5616667	0.0475044	0.5000000	0.6100000	0.0022567	8.4577541
FL_PRO	12.8500000	0.9418068	11.7000000	13.9000000	0.8870000	7.3292356
MIXO	2.1666667	0.7527727	1.0000000	3.0000000	0.5666667	34.7433532
BAKE_ABS	57.5166667	2.4045097	53.8000000	60.3000000	5.7816667	4.1805442
LOAF_VOL	198.3333333	15.8703077	183.0000000	225.0000000	251.8666667	8.0018358

VARIETY=MN88334

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	56.8500000	2.3097619	53.0000000	59.8000000	5.3350000	4.0629057
K_WT	23.7500000	3.8625121	18.2000000	28.1000000	14.9190000	16.2632090
LG	16.3333333	8.1404341	6.0000000	26.0000000	66.2666667	49.8393922
SM	10.3333333	5.1639778	4.0000000	18.0000000	26.6666667	49.9739787
WHT_ASH	1.7416667	0.1328784	1.4900000	1.8700000	0.0176567	7.6293813
WHT_PRO	14.5500000	0.8961027	13.5000000	15.6000000	0.8030000	6.1587813
HARD	65.3333333	8.9591666	52.0000000	76.0000000	80.2666667	13.7130101
EXTR	58.5000000	3.3178306	52.9000000	62.0000000	11.0080000	5.6715053
FL_ASH	0.4850000	0.0258844	0.4500000	0.5200000	0.000670000	5.3369811
FL_PRO	13.7666667	0.6377042	12.8000000	14.3000000	0.4066667	4.6322340
MIXO	1.6666667	0.5163978	1.0000000	2.0000000	0.2666667	30.9838668
BAKE_ABS	56.0500000	1.8875911	53.8000000	59.0000000	3.5630000	3.3676914
LOAF_VOL	182.5000000	11.5195486	170.0000000	202.0000000	132.7000000	6.3120814

VARIETY=ND655

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	57.1166667	4.4228573	49.1000000	62.0000000	19.5616667	7.7435494
K_WT	23.3666667	4.5723809	16.1000000	28.8000000	20.9066667	19.5679637
LG	23.0000000	11.7303026	7.0000000	38.0000000	137.6000000	51.0013158
SM	9.5000000	6.6558245	4.0000000	21.0000000	44.3000000	70.0613107
WHT_ASH	1.9033333	0.2018580	1.5900000	2.1800000	0.0407467	10.6055010
WHT PRO	15.3166667	1.0534072	14.0000000	16.9000000	1.1096667	6.8775223
HARD	67.3333333	6.9474216	59.0000000	78.0000000	48.2666667	10.3179528
EXTR	57.6166667	7.0499409	44.5000000	64.4000000	49.7016667	12.2359402
FL_ASH	0.5350000	0.0605805	0.4600000	0.6300000	0.0036700	11.3234626
FL_PRO	14.8333333	1.0576704	13.5000000	16.5000000	1.1186667	7.1303622
MIXO	3.3333333	0.8164966	2.0000000	4.0000000	0.6666667	24.4948974
BAKE_ABS	59.0166667	1.9333046	55.8000000	61.8000000	3.7376667	3.2758621
LOAF_VOL	201.6666667	31.2452663	180.0000000	258.0000000	976.2666667	15.4935205

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

SOUTHEAST REGION

TABLE 28

VARIETY=ND657

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	55.5833333	4.5079559	47.6000000	60.8000000	20.3216667	8.1102655
K_WT	27.5166667	4.3087895	20.2000000	33.4000000	18.5656667	15.6588351
LG	34.1666667	11.6002874	14.0000000	48.0000000	134.5666667	33.9520605
SM	3.5000000	3.0822070	0	9.0000000	9.5000000	88.0630572
WHT_ASH	1.9750000	0.1501666	1.7600000	2.2000000	0.0225500	7.6033708
WHT_PRO	16.4166667	0.7704977	15.5000000	17.3000000	0.5936667	4.6933869
HARD	74.5000000	7.8930349	62.0000000	86.0000000	62.3000000	10.5946777
EXTR	55.2500000	5.5251244	47.4000000	61.9000000	30.5270000	10.0002252
FL_ASH	0.5900000	0.0651153	0.5000000	0.6900000	0.0042400	11.0364885
FL_PRO	16.1000000	0.4732864	15.5000000	16.8000000	0.2240000	2.9396670
MIXO	4.0000000	1.0954451	3.0000000	5.0000000	1.2000000	27.3861279
BAKE_ABS	60.6333333	0.4457204	60.0000000	61.1000000	0.1986667	0.7351078
LOAF_VOL	206.8333333	25.2936092	190.0000000	257.0000000	639.7666667	12.2289811

VARIETY=ND662

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	55.8500000	2.6425367	51.6000000	59.6000000	6.9830000	4.7314891
K_WT	25.3666667	3.4529215	21.1000000	29.9000000	11.9226667	13.6120426
LG	21.8333333	10.5719755	8.0000000	36.0000000	111.7666667	48.4212620
SM	6.6666667	3.7771241	2.0000000	13.0000000	14.2666667	56.6568619
WHT_ASH	1.8416667	0.1444184	1.5800000	1.9800000	0.0208567	7.8417216
WHT_PRO	15.5500000	0.8893818	14.1000000	16.4000000	0.7910000	5.7194972
HARD	68.1666667	7.4139508	54.0000000	75.0000000	54.9666667	10.8762115
EXTR	58.0666667	5.9922172	48.1000000	63.9000000	35.9066667	10.3195474
FL_ASH	0.5216667	0.0746771	0.4300000	0.6200000	0.0055767	14.3150957
FL_PRO	14.7000000	0.7949843	13.4000000	15.4000000	0.6320000	5.4080563
MIXO	5.1666667	1.4719601	4.0000000	7.0000000	2.1666667	28.4895512
BAKE_ABS	57.0833333	1.1461530	55.3000000	58.6000000	1.3136667	2.0078592
LOAF_VOL	191.1666667	18.7661042	169.0000000	216.0000000	352.1666667	9.8166195

VARIETY=ND671

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	57.9833333	3.7917894	51.6000000	62.6000000	14.3776667	6.5394470
K_WT	24.6333333	4.1005691	18.7000000	29.4000000	16.8146667	16.6464238
LG	24.6666667	9.8319208	10.0000000	33.0000000	96.6666667	39.8591384
SM	6.1666667	4.7504386	2.0000000	14.0000000	22.5666667	77.0341391
WHT_ASH	1.8833333	0.1963331	1.5100000	2.0800000	0.0385467	10.4247637
WHT_PRO	15.2833333	1.3556056	13.7000000	16.6000000	1.8376667	8.8698297
HARD	65.6666667	6.7131711	57.0000000	76.0000000	45.0666667	10.2231032
EXTR	58.2666667	3.2004166	53.4000000	61.7000000	10.2426667	5.4927059
FL_ASH	0.4900000	0.0644981	0.4100000	0.6000000	0.0041600	13.1628698
FL_PRO	15.0166667	1.2952477	13.4000000	16.4000000	1.6776667	8.6254010
MIXO	4.5000000	0.8366600	3.0000000	5.0000000	0.7000000	18.5924450
BAKE_ABS	60.2833333	2.4895113	57.3000000	64.0000000	6.1976667	4.1296843
LOAF_VOL	197.6666667	17.5233178	181.0000000	228.0000000	307.0666667	8.8650849

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

SOUTHEAST REGION

TABLE 29

VARIETY=ND672

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	55.9500000	3.9210968	49.0000000	59.8000000	15.3750000	7.0082159
K_WT	21.9333333	3.5200379	15.6000000	25.2000000	12.3906667	16.0488049
LG	18.1666667	9.8674549	5.0000000	33.0000000	97.3666667	54.3162656
SM	11.0000000	6.4187226	5.0000000	23.0000000	41.2000000	58.3520238
WHT ASH	1.8650000	0.1975601	1.6100000	2.1200000	0.0390300	10.5930358
WHT_PRO	15.0166667	1.2155931	13.3000000	16.5000000	1.4776667	8.0949598
HARD	74.5000000	9.5864488	60.0000000	86.0000000	91.9000000	12.8677165
EXTR	54.4166667	3.3078190	50.3000000	58.5000000	10.9416667	6.0786873
FL_ASH	0.5883333	0.0549242	0.5400000	0.6900000	0.0030167	9.3355564
FL_PRO	13.6000000	1.2132601	12.0000000	15.5000000	1.4720000	8.9210299
MIXO	3.6666667	0.5163978	3.0000000	4.0000000	0.2666667	14.0835758
BAKE_ABS	57.0166667	1.8861778	55.0000000	59.3000000	3.5576667	3.3081166
LOAF_VOL	192.5000000	19.9874961	168.0000000	226.0000000	399.5000000	10.3831149

VARIETY=N86-0542

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	53.5833333	4.0106940	46.1000000	57.4000000	16.0856667	7.4849655
K_WT	25.3666667	4.5697556	18.3000000	30.6000000	20.8826667	18.0148054
LG	23.5000000	12.6134848	8.0000000	38.0000000	159.1000000	53.6744036
SM	8.5000000	6.4420494	2.0000000	20.0000000	41.5000000	75.7888160
WHT_ASH	1.9783333	0.1650959	1.6700000	2.1700000	0.0272567	8.3452030
WHT_PRO	14.3333333	0.9831921	13.0000000	15.5000000	0.9666667	6.8594796
HARD	59.3333333	7.5277265	51.0000000	71.0000000	56.6666667	12.6871795
EXTR	56.3000000	5.3310412	46.0000000	60.9000000	28.4200000	9.4689897
FL_ASH	0.5733333	0.0828654	0.4900000	0.7200000	0.0068667	14.4532592
FL_PRO	13.6000000	1.0059821	12.5000000	14.8000000	1.0120000	7.3969273
MIXO	3.5000000	1.0488088	2.0000000	5.0000000	1.1000000	29.9659671
BAKE_ABS	58.5000000	1.6480291	56.5000000	61.1000000	2.7160000	2.8171438
LOAF_VOL	196.3333333	19.6333050	183.0000000	235.0000000	385.4666667	9.9999856

VARIETY=N87-0306

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	54.2500000	4.0618961	47.0000000	58.3000000	16.4990000	7.4873661
K_WT	25.3666667	4.7659906	17.2000000	31.1000000	22.7146667	18.7883993
LG	24.3333333	10.6144556	6.0000000	38.0000000	112.6666667	43.6210502
SM	7.5000000	5.4680892	3.0000000	15.0000000	29.9000000	72.9078566
WHT_ASH	1.9316667	0.2129241	1.5500000	2.1900000	0.0453367	11.0228173
WHT_PRO	15.2666667	1.1826524	13.8000000	17.0000000	1.3986667	7.7466314
HARD	64.5000000	7.3959448	55.0000000	73.0000000	54.7000000	11.4665811
EXTR	57.0666667	4.3715748	50.9000000	61.3000000	19.1106667	7.6604699
FL_ASH	0.5633333	0.0742069	0.4900000	0.6900000	0.0055067	13.1728257
FL_PRO	14.5000000	1.0954451	13.1000000	16.1000000	1.2000000	7.5547939
MIXO	4.3333333	1.0327956	3.0000000	5.0000000	1.0666667	23.8337437
BAKE_ABS	60.4666667	2.0284641	58.2000000	63.1000000	4.1146667	3.3546816
LOAF_VOL	208.1666667	28.7083031	178.0000000	261.0000000	824.1666667	13.7910183

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

TABLE 30 SOUTHEAST REGION

VARIETY=N87-467

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	52.8500000	5.7916319	41.8000000	58.6000000	33.5430000	10.9586223
K_WT	24.7000000	4.7728398	16.3000000	30.1000000	22.7800000	19.3232382
LG	19.0000000	9.7775252	5.0000000	34.0000000	95.6000000	51.4606592
SM	9.5000000	7.0922493	3.0000000	23.0000000	50.3000000	74.6552557
WHT_ASH	1.9866667	0.1731666	1.7400000	2.2700000	0.0299867	8.7164389
WHT_PRO	14.3666667	0.8936815	13.5000000	15.6000000	0.7986667	6.2205211
HARD	47.6666667	9.8522417	30.0000000	57.0000000	97.0666667	20.6690385
EXTR	56.1666667	4.6727579	48.6000000	60.9000000	21.8346667	8.3194503
FL_ASH	0.5933333	0.0893682	0.5200000	0.7600000	0.0079867	15.0620482
FL_PRO	13.5833333	0.8183316	12.7000000	14.6000000	0.6696667	6.0245274
MIXO	2.6666667	0.5163978	2.0000000	3.0000000	0.2666667	19.3649167
BAKE_ABS	57.8000000	1.5594871	56.2000000	60.0000000	2.4320000	2.6980746
LOAF_VOL	196.8333333	17.0928835	178.0000000	224.0000000	292.1666667	8.6839374

VARIETY=N88-3034

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	53.0166667	3.7112891	46.6000000	58.1000000	13.7736667	7.0002309
K_WT	23.4833333	3.1141077	19.4000000	28.6000000	9.6976667	13.2609270
LG	16.0000000	7.2387844	8.0000000	25.0000000	52.4000000	45.2424027
SM	6.6666667	3.0110906	3.0000000	10.0000000	9.0666667	45.1663592
WHT_ASH	2.0466667	0.0997330	1.8700000	2.1700000	0.0099467	4.8729468
WHT_PRO	16.1500000	1.0153817	14.4000000	17.4000000	1.0310000	6.2871932
HARD	65.0000000	7.8740079	56.0000000	78.0000000	62.0000000	12.1138583
EXTR	56.4000000	3.6027767	49.5000000	59.2000000	12.9800000	6.3879020
FL_ASH	0.5516667	0.0371035	0.4900000	0.5900000	0.0013767	6.7257025
FL_PRO	16.1166667	1.0515069	14.6000000	17.5000000	1.1056667	6.5243445
MIXO	3.1666667	0.9831921	2.0000000	4.0000000	0.9666667	31.0481710
BAKE_ABS	59.4333333	2.5216397	55.5000000	62.5000000	6.3586667	4.2428037
LOAF_VOL	207.3333333	22.8881338	192.0000000	253.0000000	523.8666667	11.0392928

VARIETY=N88-3136

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	57.1000000	3.4974276	51.0000000	60.7000000	12.2320000	6.1250922
K_WT	25.1833333	3.1808280	19.8000000	29.5000000	10.1176667	12.6306869
LG	30.8333333	9.9481992	15.0000000	42.0000000	98.9666667	32.2644297
SM	4.3333333	2.6583203	2.0000000	8.0000000	7.0666667	61.3458524
WHT_ASH	1.8833333	0.1262801	1.7800000	2.0600000	0.0159467	6.7051387
WHT_PRO	15.1833333	0.9745084	13.8000000	16.5000000	0.9496667	6.4182772
HARD	65.0000000	7.0142712	55.0000000	74.0000000	49.2000000	10.7911864
EXTR	56.1666667	3.3897886	50.2000000	60.0000000	11.4906667	6.0352319
FL_ASH	0.5266667	0.0233809	0.4900000	0.5500000	0.000546667	4.4394121
FL_PRO	14.6000000	0.8809086	13.3000000	15.9000000	0.7760000	6.0336207
MIXO	2.8333333	0.7527727	2.0000000	4.0000000	0.5666667	26.5684466
BAKE_ABS	58.5500000	1.5833509	55.5000000	60.0000000	2.5070000	2.7042714
LOAF_VOL	204.1666667	23.4044155	183.0000000	246.0000000	547.7666667	11.4633872

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

TABLE 31

SOUTHEAST REGION

VARIETY=SD3055

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	57.0666667	2.9049383	52.8000000	60.9000000	8.4386667	5.0904293
K_WT	27.1166667	3.0294664	22.4000000	31.4000000	9.1776667	11.1719720
LG	37.1666667	13.7173856	24.0000000	56.0000000	188.1666667	36.9077638
SM	4.0000000	2.5298221	1.0000000	7.0000000	6.4000000	63.2455532
WHT_ASH	1.8483333	0.1530251	1.5800000	2.0000000	0.0234167	8.2790831
WHT_PRO	15.5666667	1.1707547	14.1000000	16.6000000	1.3706667	7.5209084
HARD	63.8333333	10.9802854	55.0000000	85.0000000	120.5666667	17.2014914
EXTR	57.0166667	3.3132562	52.1000000	60.8000000	10.9776667	5.8110310
FL_ASH	0.5150000	0.0378153	0.4600000	0.5700000	0.0014300	7.3427846
FL_PRO	15.2500000	0.9523655	13.9000000	16.3000000	0.9070000	6.2450195
MIXO	3.0000000	0.8944272	2.0000000	4.0000000	0.8000000	29.8142397
BAKE_ABS	59.1166667	1.1338724	57.9000000	60.5000000	1.2856667	1.9180250
LOAF_VOL	208.3333333	19.3045763	188.0000000	235.0000000	372.6666667	9.2661966

VARIETY=SD3056

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	56.7166667	3.0155707	52.2000000	61.1000000	9.0936667	5.3169040
K_WT	27.6666667	3.5251478	23.1000000	33.3000000	12.4266667	12.7414979
LG	39.1666667	14.6480943	24.0000000	58.0000000	214.5666667	37.3993897
SM	4.3333333	2.7325202	1.0000000	8.0000000	7.4666667	63.0581586
WHT_ASH	1.8016667	0.1705775	1.5300000	2.0300000	0.0290967	9.4677586
WHT_PRO	15.3166667	0.8818541	14.0000000	16.2000000	0.7776667	5.7574806
HARD	80.8333333	7.7824589	72.0000000	93.0000000	60.5666667	9.6277842
EXTR	57.8000000	2.6389392	55.0000000	61.5000000	6.9640000	4.5656387
FL_ASH	0.5816667	0.0402078	0.5200000	0.6300000	0.0016167	6.9125147
FL_PRO	14.3666667	0.7447595	13.3000000	15.1000000	0.5546667	5.1839406
MIXO	3.1666667	0.7527727	2.0000000	4.0000000	0.5666667	23.7717680
BAKE_ABS	59.8333333	1.5807171	57.9000000	61.8000000	2.4986667	2.6418671
LOAF_VOL	200.6666667	15.3839743	179.0000000	222.0000000	236.6666667	7.6664324

VARIETY=SD3080

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	58.5500000	2.3813862	55.4000000	62.0000000	5.6710000	4.0672693
K_WT	27.2000000	2.9058562	23.0000000	31.5000000	8.4440000	10.6832947
LG	32.8333333	9.8674549	21.0000000	44.0000000	97.3666667	30.0531622
SM	5.3333333	2.8751812	1.0000000	9.0000000	8.2666667	53.9096466
WHT_ASH	1.7483333	0.1836754	1.4300000	1.9400000	0.0337367	10.5057448
WHT_PRO	15.2833333	1.2303116	13.7000000	16.8000000	1.5136667	8.0500215
HARD	71.5000000	3.8858718	68.0000000	78.0000000	15.1000000	5.4347858
EXTR	56.0166667	3.0459262	50.2000000	58.0000000	9.2776667	5.4375357
FL_ASH	0.4966667	0.0372380	0.4300000	0.5300000	0.0013867	7.4975785
FL_PRO	14.6500000	1.2533954	13.2000000	16.4000000	1.5710000	8.5555999
MIXO	4.1666667	1.1690452	3.0000000	6.0000000	1.3666667	28.0570847
BAKE_ABS	59.2666667	2.4881050	57.3000000	64.0000000	6.1906667	4.1981525
LOAF_VOL	198.1666667	21.2265557	175.0000000	225.0000000	450.5666667	10.7114663

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

SOUTHEAST REGION

TABLE 32

VARIETY=SD8072

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	57.0833333	3.5022374	51.4000000	61.8000000	12.2656667	6.1353064
K_WT	27.3500000	4.2552321	20.7000000	33.0000000	18.1070000	15.5584354
LG	39.0000000	16.5529454	15.0000000	59.0000000	274.0000000	42.4434496
SM	3.0000000	2.6076810	1.0000000	8.0000000	6.8000000	86.9226987
WHT_ASH	1.8783333	0.1890414	1.5400000	2.0600000	0.0357367	10.0643181
WHT_PRO	15.0833333	1.3075422	13.2000000	16.3000000	1.7096667	8.6687882
HARD	76.3333333	7.0332543	65.0000000	84.0000000	49.4666667	9.2138703
EXTR	59.2833333	3.9341666	51.6000000	62.6000000	15.4776667	6.6362101
FL_ASH	0.5483333	0.0411906	0.4800000	0.6000000	0.0016967	7.5119660
FL_PRO	14.2666667	1.3589211	12.2000000	15.7000000	1.8466667	9.5251482
MIXO	3.0000000	1.0954451	2.0000000	5.0000000	1.2000000	36.5148372
BAKE_ABS	57.6833333	1.4105554	55.5000000	59.6000000	1.9896667	2.4453432
LOAF_VOL	188.5000000	19.1702895	161.0000000	213.0000000	367.5000000	10.1699149

VARIETY=SD8073

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	56.0166667	3.3247055	51.1000000	61.0000000	11.0536667	5.9352077
K_WT	27.0000000	4.1095012	21.0000000	32.9000000	16.8880000	15.2203748
LG	35.8333333	14.4141135	16.0000000	55.0000000	207.7666667	40.2254329
SM	2.8333333	1.9407902	1.0000000	6.0000000	3.7666667	68.4984782
WHT_ASH	1.8633333	0.1773885	1.5500000	2.0200000	0.0314667	9.5199533
WHT_PRO	15.0000000	0.9899495	13.6000000	15.9000000	0.9800000	6.5996633
HARD	76.1666667	10.5719755	60.0000000	89.0000000	111.7666667	13.8800554
EXTR	57.8166667	3.6853313	52.1000000	61.1000000	13.5816667	6.3741677
FL_ASH	0.5850000	0.0476445	0.4900000	0.6200000	0.0022700	8.1443619
FL_PRO	14.1333333	0.8640988	12.8000000	14.9000000	0.7466667	6.1139063
MIXO	3.6666667	1.0327956	2.0000000	5.0000000	1.0666667	28.1671516
BAKE_ABS	60.6500000	1.4377065	58.6000000	62.5000000	2.0670000	2.3704971
LOAF_VOL	194.3333333	24.3775853	165.0000000	235.0000000	594.2666667	12.5442120

VARIETY=SD8074

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	56.2000000	3.4105718	51.6000000	61.8000000	11.6320000	6.0686331
K_WT	25.2500000	4.0411632	20.5000000	31.5000000	16.3310000	16.0046067
LG	28.6666667	13.6918467	14.0000000	49.0000000	187.4666667	47.7622560
SM	4.0000000	2.7568098	1.0000000	8.0000000	7.6000000	68.9202438
WHT_ASH	1.8233333	0.1303329	1.5800000	1.9600000	0.0169867	7.1480571
WHT_PRO	14.8333333	1.0250203	13.3000000	15.9000000	1.0506667	6.9102494
HARD	73.3333333	9.2448184	60.0000000	84.0000000	85.4666667	12.6065705
EXTR	57.7166667	3.1701209	54.5000000	62.7000000	10.0496667	5.4925572
FL_ASH	0.5450000	0.0488876	0.4500000	0.5900000	0.0023900	8.9702067
FL_PRO	13.8166667	0.8931219	12.2000000	14.6000000	0.7976667	6.4640907
MIXO	4.3333333	1.5055453	2.0000000	6.0000000	2.2666667	34.7433532
BAKE_ABS	58.6166667	2.1414170	55.8000000	61.8000000	4.5856667	3.6532561
LOAF_VOL	188.6666667	17.9962959	166.0000000	216.0000000	323.8666667	9.5386727

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

SOUTHEAST REGION

TABLE 33

VARIETY=STOA

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	55.8000000	4.2218479	48.0000000	60.1000000	17.8240000	7.5660357
K_WT	24.4500000	4.5271404	17.4000000	29.8000000	20.4950000	18.5159116
LG	20.5000000	14.3213128	5.0000000	46.0000000	205.1000000	69.8600624
SM	7.6666667	6.2182527	0	18.0000000	38.6666667	81.1076439
WHT_ASH	1.8716667	0.1747474	1.6400000	2.0800000	0.0305367	9.3364614
WHT_PRO	15.1333333	1.2388166	13.4000000	16.6000000	1.5346667	8.1860130
HARD	70.5000000	6.4109282	59.0000000	78.0000000	41.1000000	9.0935151
EXTR	56.2833333	4.7654660	50.7000000	62.2000000	22.7096667	8.4669222
FL_ASH	0.5383333	0.0435507	0.4900000	0.5900000	0.0018967	8.0899201
FL_PRO	14.2666667	1.1621819	12.8000000	16.1000000	1.3506667	8.1461345
MIXO	3.3333333	0.8164966	2.0000000	4.0000000	0.6666667	24.4948974
BAKE_ABS	59.3500000	1.2880217	57.6000000	60.5000000	1.6590000	2.1702135
LOAF_VOL	187.6666667	15.9708067	171.0000000	217.0000000	255.0666667	8.5101990

VARIETY=XW398A4

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	54.0500000	5.2217813	44.5000000	58.6000000	27.2670000	9.6610200
K_WT	25.6500000	4.9358890	16.7000000	31.0000000	24.3630000	19.2432319
LG	20.3333333	8.6409876	7.0000000	31.0000000	74.6666667	42.4966603
SM	7.1666667	6.6156380	1.0000000	20.0000000	43.7666667	92.3112285
WHT_ASH	2.0100000	0.2063008	1.7300000	2.3600000	0.0425600	10.2637190
WHT_PRO	14.7166667	0.9432214	13.6000000	15.8000000	0.8896667	6.4092056
HARD	55.1666667	10.3231132	37.0000000	66.0000000	106.5666667	18.7125919
EXTR	53.1000000	5.3859075	43.8000000	58.6000000	29.0080000	10.1429520
FL_ASH	0.6750000	0.0973139	0.6100000	0.8700000	0.0094700	14.4168778
FL_PRO	14.1666667	0.8477421	13.3000000	15.1000000	0.7186667	5.9840619
MIXO	3.0000000	0.6324555	2.0000000	4.0000000	0.4000000	21.0818511
BAKE_ABS	58.5666667	2.1210061	55.5000000	61.8000000	4.4986667	3.6215243
LOAF_VOL	200.1666667	20.1337196	183.0000000	238.0000000	405.3666667	10.0584778

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=NORTH DAKOTA STATION=WILLISTON NURSERY=UNIFORM

TABLE 34

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
*AMIDON		60.3	28.2	32	4	1.58	16.5	85	4	57.0	0.52	15.3	5	3	58.2	2
BUTTE 86	S	61.5	33.3	50	1	1.70	17.2	77	4	56.6	0.53	16.4	5	3	59.0	2
CHRIS		60.3	22.8	9	7	1.70	17.0	63	3	56.7	0.49	16.3	5	3	56.2	2
*CUTLESS		60.7	28.0	17	1	1.68	17.3	66	4	55.2	0.52	16.8	5	2	60.0	4
ERA	S	59.1	24.1	13	7	1.74	15.4	55	4	63.6	0.39	14.5	5	4	58.6	3
MARQUIS		60.6	25.5	24	4	1.80	15.6	57	4	51.9	0.53	14.3	5	2	55.0	2
*NORDIC		63.6	35.5	50	1	1.55	15.3	56	4	57.9	0.42	14.1	5	4	58.6	2
STOA	S	61.3	27.9	22	1	1.70	16.4	63	4	58.9	0.47	15.5	5	4	59.3	2
*VANCE		61.3	31.4	37	0	1.69	15.7	58	4	62.7	0.39	15.3	5	4	57.6	2
SD3055		60.5	33.6	59	2	1.77	17.7	66	4	58.2	0.53	17.6	5	4	60.3	2
SD3056		59.3	34.6	61	0	1.75	17.7	77	4	53.3	0.65	16.9	5	1	60.5	2
SD3080		61.7	31.8	45	0	1.63	17.2	66	4	56.8	0.50	17.1	5	3	61.1	3
SD8072		61.2	32.9	59	0	1.68	17.1	73	4	59.3	0.53	16.4	5	4	59.3	2
SD8073		61.0	32.3	52	0	1.64	16.5	84	4	59.9	0.54	15.8	5	4	60.5	3
SD8074		60.0	29.7	39	3	1.69	16.8	68	4	56.1	0.58	15.9	5	3	60.3	3
MN87150		58.9	28.9	43	7	1.68	16.1	50	4	55.0	0.52	15.4	5	2	55.8	1
MN88170		56.1	26.9	13	7	1.73	15.2	56	3	58.3	0.52	13.9	5	4	55.5	1
MN88189		59.0	32.8	49	4	1.63	16.5	63	4	60.4	0.45	15.6	5	4	59.0	3
MN88320		61.8	32.8	55	4	1.69	15.9	67	4	61.2	0.47	15.2	5	4	58.2	2
MN88334		60.6	26.9	14	5	1.54	15.6	48	4	59.2	0.47	14.6	5	4	54.6	1
ND655		60.8	29.1	36	5	1.71	17.9	70	4	59.0	0.52	17.3	5	4	59.3	2
ND657		59.9	29.2	31	3	1.66	17.2	67	4	55.7	0.58	16.8	5	3	61.1	3
ND662		60.1	32.8	43	4	1.65	17.5	75	4	60.0	0.54	16.8	5	4	60.8	7
ND671		61.4	33.0	51	2	1.68	17.9	69	4	57.6	0.49	17.6	5	4	61.4	3
ND672		61.0	31.2	48	3	1.70	17.3	81	4	61.2	0.48	16.8	5	4	63.7	6
XW398A4		60.0	30.1	29	4	1.74	16.3	48	4	55.9	0.53	16.1	5	3	61.1	4
N86-0542		59.0	28.9	29	6	1.73	15.4	54	4	57.5	0.49	14.8	5	3	59.3	3
N87-0306		57.6	28.1	33	6	1.70	16.7	53	4	66.0	0.40	16.6	5	4	56.0	6
N88-3136		61.0	30.2	45	3	1.68	16.7	63	4	56.1	0.50	16.2	5	3	58.6	2
N88-3034		57.0	27.0	18	6	1.86	17.6	69	4	59.5	0.53	17.4	5	4	59.3	2
N87-467		58.0	30.2	24	7	1.79	15.8	41	4	60.6	0.47	15.0	5	4	61.4	4
FA987-350		60.5	41.3	78	3	1.74	16.8	60	4	50.2	0.53	15.9	5	2	58.6	2
CI982-309		54.7	24.3	15	10	1.87	16.8	66	3	48.8	0.55	16.8	5	2	60.5	5
AC-MINTO		58.0	27.9	27	3	1.72	17.1	71	4	54.2	0.53	16.4	5	2	57.3	3
BW148		59.5	29.3	37	3	1.82	17.3	74	4	50.9	0.60	16.5	5	2	60.5	3
ID367		57.7	27.1	11	7	1.67	15.3	52	4	54.1	0.51	14.3	5	2	56.2	3

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=NORTH DAKOTA STATION=WILLISTON NURSERY=UNIFORM

TABLE 34 (CONT)

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
*AMIDON		58.2	4.00	9	80	80	198	2	3.0					MI				MI	MJ				MI	
BUTTE 86	S	59.0	2.75	9	80	80	190	1	2.7					MI				MI	MJ	MI			MI	
CHRIS		56.2	4.00	9	75	80	192	2	2.7		MJ			MI				MI	MJ			MI	MI	
*CUTLESS		60.0	4.00	9	80	85	216	2	2.7					MJ					MJ					
ERA	S	58.6	5.00	9	80	85	216	2	3.3		MI								MJ					
MARQUIS		55.0	4.50	9	80	80	197	2	2.7		MI			MJ				MI	MJ				MI	
*NORDIC		58.6	4.00	9	80	80	190	2	3.3									MI	MJ				MI	
STOA	S	59.3	5.00	9	80	80	201	2	3.3									MI	MJ				MI	
*VANCE		57.6	3.00	9	80	85	187	2	3.3									MI	MJ					
SD3055		60.3	2.50	9	80	80	211	1	3.0									MI	MJ	MI			MI	
SD3056		60.5	2.25	9	80	80	202	2	2.3					MJ	MJ			MI	MI	MI			MI	
SD3080		61.1	3.25	9	80	80	206	3	3.3					MI					MI				MI	
SD8072		59.3	3.25	9	80	85	180	1	3.0									MI	MJ					MI
SD8073		60.5	3.50	9	80	80	189	3	3.7										MI				MI	
SD8074		60.3	4.00	9	75	80	184	2	3.0					MI	MI				MJ			MI	MI	
MN87150		55.8	3.00	7	75	80	197	1	2.3					MJ				MJ	MJ			MI	MI	
MN88170		55.5	2.75	5	75	90	187	1	2.7	MJ								MJ	MJ	MI	MI	MI		
MN88189		59.0	3.75	9	80	85	201	2	3.3										MJ					
MN88320		58.2	3.00	9	80	85	198	2	3.3									MI	MJ					
MN88334		54.6	3.50	5	80	75	168	1	3.0									MJ	MJ		MI		MI	MJ
ND655		59.3	3.00	9	80	75	182	2	3.3									MI	MJ				MI	
ND657		61.1	3.00	9	80	80	202	3	3.3					MI	MI				MI				MI	
ND662		60.8	4.00	9	80	80	178	2	3.3									MI	MI				MI	MI
ND671		61.4	2.50	9	85	75	193	2	3.3										MI	MI			MI	
ND672		63.7	4.00	9	90	85	195	4	4.0															
XW398A4		61.1	6.75	9	85	85	214	2	3.0					MI					MI	MI				
N86-0542		59.3	4.50	9	75	85	194	2	3.0					MI					MJ			MI		
N87-0306		56.0	4.00	9	80	75	214	2	3.3	MI									MJ				MI	
N88-3136		58.6	3.75	9	80	70	200	2	3.0					MI				MI	MJ				MI	
N88-3034		59.3	3.00	9	75	80	208	2	3.3	MI								MI	MJ			MI	MI	
N87-467		61.4	5.00	9	85	90	232	3	3.7										MI					
FA987-350		58.6	4.00	9	85	85	200	2	2.7					MJ				MI	MJ					
CI982-309		60.5	6.50	9	80	80	188	2	2.3	MJ	MI	MI		MJ					MI	MI			MI	
AC-MINTO		57.3	3.00	9	80	85	188	2	2.7					MJ					MJ					
BW148		60.5	2.50	9	85	80	175	1	2.3					MJ	MI				MI	MI			MI	MI
ID367		56.2	5.00	9	80	80	197	2	2.7	MI				MJ					MJ				MI	

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	26.3	8	13.9	57.6	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	75	80	181
MAJOR FAULTING VALUES	56.9	23.3	18	12.9	55.6	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	50	50	171

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

* CULTIVARS WERE NOT INCLUDED IN REGIONAL STATISTICAL DATA.

TABLE 35

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=NORTH DAKOTA STATION=DICKINSON NURSERY=UNIFORM

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
BUTTE86	S	59.6	29.8	22	2	1.74	17.4	93	4	63.5	0.49	16.3	5	4	61.4	4
ERA	S	56.6	23.7	6	11	1.85	17.1	77	3	62.0	0.57	16.0	5	4	61.1	5
MARQUIS		58.6	24.5	15	5	1.81	17.0	83	4	54.1	0.59	15.8	4	2	60.0	3
STOA	S	57.3	24.8	6	7	1.88	17.4	71	4	61.8	0.51	16.5	5	4	62.5	5
AC-MINTO		57.8	26.9	19	3	1.74	17.9	95	4	59.7	0.49	17.2	5	3	59.3	3
BW-148		60.4	40.2	31	2	1.80	17.8	81	4	62.8	0.55	17.0	5	4	61.4	4
CI 982-309		54.7	25.3	15	7	1.96	18.0	94	3	55.6	0.58	17.7	5	2	62.7	7
FA 987-350		59.0	37.9	65	2	1.66	17.4	66	4	57.6	0.51	16.2	5	2	57.3	3
ID 367		55.1	22.0	5	10	1.76	17.1	76	3	56.8	0.55	16.3	5	2	59.6	5
N 87-0306		57.2	27.8	22	4	1.68	17.1	70	4	58.4	0.51	16.5	5	3	62.1	7
N 86-0542		54.8	23.9	6	11	1.90	16.9	80	3	61.0	0.50	16.5	5	4	56.5	4
N 87-467		57.6	29.3	18	2	1.83	16.2	46	4	59.3	0.51	15.8	5	3	60.5	5
N 88-3034		56.1	24.5	8	7	2.09	18.0	79	3	61.8	0.53	17.5	5	4	61.4	3
N 88 3136		61.5	27.6	20	3	1.81	16.9	68	4	59.3	0.54	16.3	5	3	60.3	4
MN 87150		56.7	26.4	7	6	1.77	16.4	76	3	58.5	0.52	15.8	5	3	60.0	3
MN 88170		53.9	23.7	5	8	1.83	16.7	74	3	58.6	0.60	15.7	4	3	60.8	3
MN 88189		57.5	32.1	30	7	1.69	16.9	70	4	64.6	0.45	16.3	5	4	61.4	5
MN 88320		59.8	28.4	25	4	1.69	15.4	73	4	61.2	0.51	15.1	5	4	61.1	4
ND 655		58.2	24.4	9	11	1.82	17.4	88	4	59.4	0.56	16.9	5	3	62.5	4
ND 657		58.2	26.6	13	5	1.81	17.8	81	4	58.4	0.59	17.6	5	3	63.4	5
ND 662		59.2	29.7	17	5	1.68	16.9	91	4	64.1	0.53	16.7	5	4	60.5	8
ND 671		61.0	29.8	35	1	1.80	17.3	70	4	60.6	0.41	17.5	5	4	63.1	7
ND 672		NO SAMPLE AVAILABLE														
ND 88334		58.6	23.3	5	10	1.68	16.4	87	4	62.5	0.45	15.9	5	4	58.6	3
SD 3055		59.2	31.2	36	3	1.78	17.3	67	4	60.1	0.50	17.1	5	3	61.8	5
SD 3056		58.8	32.5	43	3	1.71	17.0	88	4	60.2	0.55	16.4	5	3	61.8	4
SD 3080		60.3	29.5	24	4	1.59	17.4	73	4	60.3	0.48	17.1	5	3	61.8	8
SD 8072		61.7	33.6	48	2	1.65	17.1	96	4	63.0	0.49	16.7	5	4	62.1	5
SD 8073		59.7	30.1	26	2	1.71	16.6	85	4	61.8	0.53	16.2	5	4	60.0	5
SD 8074		60.8	30.4	29	2	1.62	17.3	89	4	60.3	0.50	16.1	5	3	60.3	4
XW 398A4		58.2	28.9	15	5	1.80	16.6	61	4	58.5	0.53	16.6	5	3	61.1	7

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=NORTH DAKOTA STATION=DICKINSON NURSERY=UNIFORM

TABLE 35 (CONT)

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
BUTTE86	S	61.4	3.75	9	85	75	181	3	3.7										MI				MI	
ERA	S	61.1	4.50	9	85	80	185	3	3.3		MJ	MI	MI		MI				MI				MI	
MARQUIS		60.0	4.00	9	80	85	184	2	2.7					MJ	MI				MJ					
STOA	S	62.5	5.25	9	80	85	187	4	4.0		MI													
AC-MINTO		59.3	3.25	9	80	85	180	2	3.0		MI			MI					MJ					
BW-148		61.4	3.50	9	85	80	171	3	3.7										MI				MI	
CI 982-309		62.7	6.50	9	80	85	190	3	2.7		MJ			MJ	MI			MI		MI				
FA 987-350		57.3	6.00	9	80	85	185	1	2.3					MJ					MJ	MI				
ID 367		59.6	6.00	9	80	85	195	1	2.0		MJ	MI	MI	MJ					MJ	MI				
N 87-0306		62.1	5.50	9	80	75	195	4	3.7		MI			MI				MI						MI
N 86-0542		56.5	5.25	9	80	75	193	2	3.0		MJ	MI	MI						MJ					MI
N 87-467		60.5	6.75	9	80	80	193	2	3.0		MI			MI					MI	MI				MI
N 88-3034		61.4	3.25	9	85	75	204	3	3.3		MJ								MI					MI
N 88 3136		60.3	4.50	9	80	80	213	2	3.0					MI					MJ					MI
MN 87150		60.0	3.00	9	85	80	201	2	2.7		MJ			MI					MJ					MI
MN 88170		60.8	2.50	5	85	85	170	2	2.7		MJ	MI	MI	MI	MI				MI	MI	MI			
MN 88189		61.4	4.25	9	80	85	170	3	3.7		MI								MI					
MN 88320		61.1	4.50	9	90	80	192	3	3.7										MI					MI
ND 655		62.5	4.75	7	80	85	178	4	3.7				MI	MI										
ND 657		63.4	4.50	7	80	85	206	4	3.7					MI	MI									
ND 662		60.5	7.00	9	80	80	183	2	3.3									MI	MI	MI				MI
ND 671		63.1	4.25	9	80	85	184	4	4.0									MI						
ND 672		.	.	.	.	.	.	4	4.0															
ND 88334		58.6	3.75	9	80	80	184	2	3.3			MI	MI						MJ					MI
SD 3055		61.8	4.25	9	80	80	192	3	3.3					MI					MI					MI
SD 3056		61.8	4.00	9	85	85	193	3	3.3					MI					MI					
SD 3080		61.8	5.25	9	80	85	200	3	3.3					MI				MI	MI					
SD 8072		62.1	4.00	7	80	90	170	4	4.0															
SD 8073		60.0	5.00	7	80	80	178	2	3.3										MJ					MI
SD 8074		60.3	5.25	7	80	80	185	2	3.0					MI					MJ					MI
XW 398A4		61.1	8.25	9	85	80	198	1	2.7					MI				MI	MI	MJ				MI

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	24.0	8	13.9	60.3	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	75	80	163
MAJOR FAULTING VALUES	56.9	21.0	18	12.9	58.3	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	50	50	153

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

TABLE 36

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=WYOMING STATION=POWELL NURSERY=UNIFORM

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
BUTTE 86	S	63.1	40.0	78	0	1.66	13.1	72	3	62.8	0.47	12.1	5	2	57.3	1
CHRIS		62.6	31.3	47	1	1.54	14.0	66	4	65.2	0.45	14.3	5	4	57.3	1
ERA	S	62.6	33.4	67	2	1.54	11.3	62	2	65.6	0.48	9.9	5	2	53.8	1
MARQUIS		61.5	33.6	62	1	1.62	13.0	61	3	62.1	0.54	12.2	5	1	54.3	1
STOA	S	62.8	35.5	62	2	1.62	11.6	66	2	65.6	0.45	10.1	5	2	55.0	1
SD3055		63.4	41.0	82	1	1.68	12.7	57	2	62.0	0.48	12.2	5	1	55.5	1
SD3056		62.6	41.7	84	2	1.67	12.4	65	2	62.6	0.52	11.0	5	2	56.5	1
SD3080		64.5	38.9	72	2	1.68	13.3	62	3	62.7	0.45	12.5	5	3	57.9	1
SD8072		63.4	38.0	80	1	1.68	12.4	72	2	63.8	0.50	11.3	5	2	57.6	1
SD8073		63.1	39.8	80	2	1.61	11.6	70	2	62.3	0.49	10.0	5	1	57.3	2
SD8074		64.5	34.4	70	1	1.64	12.0	68	2	60.3	0.51	10.6	5	1	57.9	2
MN87150		63.0	40.2	76	1	1.53	12.2	61	2	65.6	0.47	11.1	5	2	55.0	1
MN88170		60.8	40.3	74	2	1.57	11.5	50	2	64.2	0.48	10.0	5	2	54.6	1
MN88189		63.1	44.8	86	1	1.63	13.3	58	3	67.4	0.43	13.0	5	4	59.3	2
MN88320		64.9	39.4	77	1	1.54	12.4	62	2	63.7	0.47	11.1	5	2	57.3	1
MN88334		62.2	35.7	68	1	1.56	12.4	53	2	63.6	0.45	11.1	5	2	54.6	1
ND655		63.4	35.6	74	1	1.61	12.1	57	2	63.2	0.47	11.2	5	2	56.2	1
ND657		61.7	40.3	82	1	1.70	13.1	60	3	63.5	0.51	12.7	5	3	58.2	2
ND662		63.1	37.2	65	1	1.61	13.5	65	3	62.3	0.45	12.7	5	2	58.2	2
ND671		64.6	37.6	67	1	1.73	13.0	60	3	60.3	0.46	12.8	5	1	56.9	2
ND672		62.7	37.9	80	1	1.61	11.5	70	2	60.9	0.49	9.9	5	1	55.8	2
XW398A4		63.5	42.6	81	2	1.66	12.2	55	2	64.6	0.52	11.2	5	2	57.3	2
N86-0542		62.2	38.9	78	1	1.56	11.4	53	2	64.2	0.43	10.5	5	2	56.2	2
N87-0306		64.5	43.7	80	2	1.60	12.2	70	2	63.6	0.46	11.1	5	2	58.6	2
N88-3136		62.2	37.3	80	0	1.59	12.4	60	2	61.2	0.52	11.6	5	1	56.5	2
N88-3034		59.7	34.5	63	0	1.72	13.4	59	3	64.9	0.51	13.2	5	4	57.3	2
N87-467		62.6	41.5	79	1	1.60	11.5	57	2	64.2	0.50	10.1	5	2	55.8	1
FA987-350		62.8	46.9	90	1	1.68	12.1	62	2	65.1	0.45	11.4	5	2	59.3	2
CI982-309		57.2	35.5	71	1	1.62	11.8	64	2	59.6	0.52	10.8	5	1	57.3	2
AC-MINTO		62.5	36.2	71	1	1.66	13.0	66	3	58.8	0.55	11.8	5	1	55.0	1
BW148		63.2	34.6	64	1	1.73	13.6	70	3	58.8	0.59	12.8	5	1	57.6	1
ID0367		61.8	37.6	69	1	1.62	11.1	68	2	64.2	0.46	10.4	5	2	55.0	1

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=WYOMING STATION=POWELL NURSERY=UNIFORM

TABLE 36 (CONT)

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
BUTTE 86	S	.	.	.	.	.	.	3	2.7				MI			MJ		MJ						
CHRIS		.	.	.	.	.	.	3	3.7		MI							MJ						
ERA	S	.	.	.	.	.	.	3	2.3		MI		MJ			MJ		MJ						
MARQUIS		.	.	.	.	.	.	3	2.3		MI		MI	MI		MJ		MJ						
STOA	S	.	.	.	.	.	.	3	2.3				MJ			MJ		MJ						
SD3055		.	.	.	.	.	.	3	2.0				MJ	MI		MJ		MJ						
SD3056		.	.	.	.	.	.	3	2.3				MJ			MJ		MJ						
SD3080		.	.	.	.	.	.	3	3.0				MI			MI		MJ						
SD8072		.	.	.	.	.	.	3	2.3				MJ			MJ		MJ						
SD8073		.	.	.	.	.	.	4	2.3				MJ	MI		MJ		MI						
SD8074		.	.	.	.	.	.	4	2.3				MJ	MJ		MJ		MI						
MN87150		.	.	.	.	.	.	3	2.3				MJ			MJ		MJ						
MN88170		.	.	.	.	.	.	3	2.3				MJ			MJ		MJ						
MN88189		.	.	.	.	.	.	4	3.7				MI					MI						
MN88320		.	.	.	.	.	.	3	2.3				MJ			MJ		MJ						
MN88334		.	.	.	.	.	.	3	2.3				MJ			MJ		MJ						
ND655		.	.	.	.	.	.	3	2.3				MJ			MJ		MJ						
ND657		.	.	.	.	.	.	4	3.3				MI			MI		MI						
ND662		.	.	.	.	.	.	4	3.0				MI	MI		MI		MI						
ND671		.	.	.	.	.	.	4	2.7				MI	MJ		MI		MI						
ND672		.	.	.	.	.	.	4	2.3				MJ	MI		MJ		MI						
XW398A4		.	.	.	.	.	.	4	2.7				MJ			MJ		MI						
N86-0542		.	.	.	.	.	.	4	2.7				MJ			MJ		MI						
N87-0306		.	.	.	.	.	.	4	2.7				MJ			MJ		MI						
N88-3136		.	.	.	.	.	.	4	2.3				MJ	MI		MJ		MI						
N88-3034		.	.	.	.	.	.	4	3.7				MI					MI						
N87-467		.	.	.	.	.	.	3	2.3				MJ			MJ		MJ						
FA987-350		.	.	.	.	.	.	4	2.7				MJ			MJ		MI						
CI982-309		.	.	.	.	.	.	4	2.3		MI		MJ	MJ		MJ		MI						
AC-MINTO		.	.	.	.	.	.	3	2.3				MI	MJ		MJ		MJ						
BW148		.	.	.	.	.	.	3	2.3				MI	MJ	MI	MI		MJ						
ID0367		.	.	.	.	.	.	3	2.3				MJ			MJ		MJ						

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	34.2	8	13.9	62.6	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	75	80	.
MAJOR FAULTING VALUES	56.9	31.2	18	12.9	60.6	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	50	50	.

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=MONTANA STATION=SIDNEY NURSERY=UNIFORM

TABLE 37

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
BUTTE 86	S	60.5	33.9	47	1	5.68	15.6	76	4	62.7	0.48	15.1	5	4	62.1	3
CHRIS		59.7	25.1	17	4	1.81	16.1	77	4	61.7	0.51	16.3	5	4	60.0	3
ERA	S	57.3	23.9	13	9	1.90	14.9	59	4	61.1	0.56	14.2	5	4	57.9	3
MARQUIS		58.6	25.3	25	5	1.95	15.4	58	4	59.1	0.57	15.2	5	3	57.6	3
STOA	S	59.5	28.7	22	2	1.92	15.4	62	4	64.5	0.44	15.2	5	4	60.8	5
SD3055		61.3	28.9	78	1	1.68	15.8	69	4	65.1	0.46	15.6	5	4	60.8	2
SD3056		60.3	37.6	74	1	1.72	15.7	70	4	60.5	0.55	15.0	5	3	61.8	2
SD3080		62.1	34.2	53	1	1.75	17.0	74	4	62.7	0.48	17.0	5	4	63.4	5
SD8072		60.7	34.2	58	1	1.77	15.7	77	4	64.3	0.53	15.6	5	4	61.1	4
SD8073		61.0	33.7	54	1	1.81	14.9	74	4	65.9	0.52	14.6	5	4	60.5	4
SD8074		60.9	32.1	54	1	1.76	15.5	76	4	61.9	0.55	15.3	5	4	61.8	3
MN87150		58.6	32.3	39	2	1.66	14.9	57	4	63.4	0.46	14.8	5	4	58.2	2
MN88170		57.4	30.5	34	3	1.90	15.0	54	4	65.7	0.51	14.5	5	4	61.4	5
MN88189		58.9	36.4	69	3	1.73	16.0	59	4	64.8	0.43	16.0	5	4	61.4	4
MN88320		62.2	35.7	65	1	1.72	14.4	80	4	61.9	0.48	13.8	5	4	60.5	3
MN88334		61.5	28.7	25	4	1.73	14.5	59	4	63.8	0.37	13.6	5	4	55.0	1
ND655		61.7	34.0	56	2	1.79	15.9	77	4	66.4	0.46	15.9	5	4	63.7	4
ND657		60.3	32.3	41	1	1.73	15.5	68	4	63.9	0.49	15.3	5	4	61.1	4
ND662		59.2	31.6	26	1	1.84	15.6	61	4	63.6	0.43	15.2	5	4	61.1	7
ND671		61.4	32.9	54	1	1.78	16.7	65	4	66.0	0.42	16.1	5	4	65.1	4
ND672		60.7	31.3	38	2	1.82	15.9	85	4	61.5	0.51	15.9	5	4	61.1	5
XW398A4		60.9	35.0	47	1	1.94	15.5	56	4	65.4	0.44	15.9	5	4	60.0	7
N86-0542		58.0	27.5	25	8	1.96	14.7	67	4	65.3	0.49	14.7	5	4	61.1	3
N87-0306		59.8	32.8	45	2	1.82	15.6	63	4	63.7	0.44	15.6	5	4	61.4	4
N88-3136		60.6	31.8	43	2	1.72	16.4	67	4	62.9	0.47	16.6	5	4	59.3	3
N88-3034		58.2	30.0	34	3	1.24	16.9	70	4	64.2	0.49	17.0	5	4	59.0	2
N87-467		59.8	34.2	43	1	1.69	14.5	54	4	64.8	0.43	14.1	5	4	57.6	2
FA987350		59.8	37.9	69	1	1.81	15.1	49	4	63.3	0.47	14.6	5	4	58.2	3
CI982309		53.6	25.3	17	6	2.05	17.1	61	3	57.2	0.56	16.8	5	2	59.3	4
AC-MINTO		57.8	29.5	40	2	1.91	16.5	81	4	62.5	0.55	16.7	5	4	60.0	2
BW148		60.6	32.8	48	1	1.86	16.2	70	4	64.1	0.53	16.4	5	4	61.8	3
ID0367		58.2	27.0	18	6	1.91	14.8	47	4	61.5	0.49	14.6	5	4	59.0	4

TABLE 37 (CONT)

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=MONTANA STATION=SIDNEY NURSERY=UNIFORM

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
BUTTE 86	S	62.1	3.25	9	85	85	192	4	4.0															
CHRIS		60.0	3.25	9	80	85	194	2	3.3		MI								MJ					
ERA	S	57.9	5.50	9	90	85	195	2	3.3	MI	MI	MI							MJ					
MARQUIS		57.6	4.25	7	85	85	195	2	3.0		MI			MI	MI				MJ					
STOA	S	60.8	5.00	7	85	85	191	3	3.7										MI					
SD3055		60.8	2.75	5	85	85	196	2	3.3									MI	MI	MI	MI			
SD3056		61.8	2.50	5	80	85	198	2	3.0					MI				MI	MI	MI	MI			
SD3080		63.4	3.75	9	80	80	215	4	4.0															MI
SD8072		61.1	4.00	9	80	85	190	3	3.7										MI					
SD8073		62.5	4.25	7	80	85	184	4	4.0															
SD8074		61.8	4.00	7	80	85	189	3	3.7										MI					
MN87150		58.2	2.75	5	85	85	190	1	3.0									MI	MJ	MI	MI			
MN88170		61.4	5.25	9	80	85	195	3	3.7	MI									MI					
MN88189		61.4	3.25	9	85	85	215	3	3.7										MI					
MN88320		60.5	3.00	9	85	85	200	3	3.7										MI					
MN88334		55.0	3.75	5	95	85	188	1	3.0									MJ	MJ		MI			
ND655		65.7	3.25	9	85	80	193	4	4.0															MI
ND657		61.1	4.25	9	85	85	210	3	3.7										MI					
ND662		63.1	7.25	9	85	85	185	3	3.7									MI		MI				
ND671		65.1	3.50	9	85	85	210	4	4.0															
ND672		61.1	5.75	9	85	80	203	2	3.3										MI	MI				MI
XW398A4		60.0	5.50	9	90	70	205	2	3.3									MI	MJ					MI
N86-0542		61.1	4.00	7	80	85	215	3	3.7			MI							MI					
N87-0306		61.4	4.75	9	95	85	211	3	3.7										MI					
N88-3136		59.3	4.25	9	85	85	212	2	3.3										MJ					
N88-3034		59.0	3.00	7	80	80	210	2	3.3									MI	MJ					MI
N87-467		57.6	5.25	7	85	80	216	2	3.3									MI	MJ					MI
FA987350		58.2	4.75	5	95	85	197	2	3.3										MJ		MI			
CI982309		59.3	7.00	5	85	85	203	1	2.0	MJ	MI			MJ					MJ	MI	MI			
AC-MINTO		60.0	2.75	5	85	85	203	1	3.0	MI								MI	MJ	MI	MI			
BW148		61.8	2.75	5	85	85	191	2	3.3										MI	MI	MI			
ID0367		59.0	6.50	9	85	80	218	1	3.0										MJ	MI				MI

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	26.7	8	13.9	60.7	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	75	80	172
MAJOR FAULTING VALUES	56.9	23.7	18	12.9	58.7	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	50	50	162

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

MIDWESTERN REGION

TABLE 38

VARIETY=AC-MINTO

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	57.8666667	0.1154701	57.8000000	58.0000000	0.0133333	0.1995450
K_WT	28.1000000	1.3114877	26.9000000	29.5000000	1.7200000	4.6672160
LG	28.6666667	10.5987421	19.0000000	40.0000000	112.3333333	36.9723560
SM	2.6666667	0.5773503	2.0000000	3.0000000	0.3333333	21.6506351
WHT ASH	1.7900000	0.1044031	1.7200000	1.9100000	0.0109000	5.8325735
WHT PRO	17.1666667	0.7023769	16.5000000	17.9000000	0.4933333	4.0915160
HARD	82.3333333	12.0554275	71.0000000	95.0000000	145.3333333	14.6422197
EXTR	58.8000000	4.2225585	54.2000000	62.5000000	17.8300000	7.1812219
FL ASH	0.5233333	0.0305505	0.4900000	0.5500000	0.000933333	5.8376760
FL PRO	16.7666667	0.4041452	16.4000000	17.2000000	0.1633333	2.4104087
MIXO	2.6666667	0.5773503	2.0000000	3.0000000	0.3333333	21.6506351
BAKE ABS	58.8666667	1.4011900	57.3000000	60.0000000	1.9633333	2.3802774
LOAF VOL	190.3333333	11.6761866	180.0000000	203.0000000	136.3333333	6.1345989

VARIETY=BUTTE 86

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.5333333	0.9504385	59.6000000	61.5000000	0.9033333	1.5701076
K_WT	32.3333333	2.2143472	29.8000000	33.9000000	4.9033333	6.8484964
LG	39.6666667	15.3731367	22.0000000	50.0000000	236.3333333	38.7558069
SM	1.3333333	0.5773503	1.0000000	2.0000000	0.3333333	43.3012702
WHT_ASH	3.0400000	2.2863945	1.7000000	5.6800000	5.2276000	75.2103468
WHT_PRO	16.7333333	0.9865766	15.6000000	17.4000000	0.9733333	5.8958759
HARD	82.0000000	9.5393920	76.0000000	93.0000000	91.0000000	11.6334049
EXTR	60.9333333	3.7740341	56.6000000	63.5000000	14.2433333	6.1937102
FL_ASH	0.5000000	0.0264575	0.4800000	0.5300000	0.000700000	5.2915026
FL_PRO	15.9333333	0.7234178	15.1000000	16.4000000	0.5233333	4.5402792
MIXO	3.0000000	1.0000000	2.0000000	4.0000000	1.0000000	33.3333333
BAKE_ABS	60.8333333	1.6258331	59.0000000	62.1000000	2.6433333	2.6726024
LOAF_VOL	187.6666667	5.8594653	181.0000000	192.0000000	34.3333333	3.1222728

VARIETY=BW148

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.1666667	0.5859465	59.5000000	60.6000000	0.3433333	0.9738723
K_WT	34.1000000	5.5650696	29.3000000	40.2000000	30.9700000	16.3198523
LG	38.6666667	8.6216781	31.0000000	48.0000000	74.3333333	22.2974434
SM	2.0000000	1.0000000	1.0000000	3.0000000	1.0000000	50.0000000
WHT ASH	1.8266667	0.0305505	1.8000000	1.8600000	0.000933333	1.6724729
WHT PRO	17.1000000	0.8185353	16.2000000	17.8000000	0.6700000	4.7867560
HARD	75.0000000	5.5677644	70.0000000	81.0000000	31.0000000	7.4236858
EXTR	59.2666667	7.2748425	50.9000000	64.1000000	52.9233333	12.2747624
FL_ASH	0.5600000	0.0360555	0.5300000	0.6000000	0.0013000	6.4384844
FL_PRO	16.6333333	0.3214550	16.4000000	17.0000000	0.1033333	1.9325953
MIXO	3.3333333	0.5773503	3.0000000	4.0000000	0.3333333	17.3205081
BAKE_ABS	61.2333333	0.6658328	60.5000000	61.8000000	0.4433333	1.0873699
LOAF VOL	179.0000000	10.5830052	171.0000000	191.0000000	112.0000000	5.9122934

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

TABLE 39

MIDWESTERN REGION

VARIETY=CHRIS

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.0000000	0.4242641	59.7000000	60.3000000	0.1800000	0.7071068
K_WT	23.9500000	1.6263456	22.8000000	25.1000000	2.6450000	6.7905870
LG	13.0000000	5.6568542	9.0000000	17.0000000	32.0000000	43.5142635
SM	5.5000000	2.1213203	4.0000000	7.0000000	4.5000000	38.5694608
WHT_ASH	1.7550000	0.0777817	1.7000000	1.8100000	0.0060500	4.4320083
WHT_PRO	16.5500000	0.6363961	16.1000000	17.0000000	0.4050000	3.8452937
HARD	70.0000000	9.8994949	63.0000000	77.0000000	98.0000000	14.1421356
EXTR	59.2000000	3.5355339	56.7000000	61.7000000	12.5000000	5.9721857
FL_ASH	0.5000000	0.0141421	0.4900000	0.5100000	0.000200000	2.8284271
FL_PRO	16.3000000	0	16.3000000	16.3000000	0	0
MIXO	2.5000000	0.7071068	2.0000000	3.0000000	0.5000000	28.2842712
BAKE_ABS	58.1000000	2.6870058	56.2000000	60.0000000	7.2200000	4.6247948
LOAF_VOL	193.0000000	1.4142136	192.0000000	194.0000000	2.0000000	0.7327531

VARIETY=CI982309

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	54.3333333	0.6350853	53.6000000	54.7000000	0.4033333	1.1688686
K_WT	24.9666667	0.5773503	24.3000000	25.3000000	0.3333333	2.3124844
LG	15.6666667	1.1547005	15.0000000	17.0000000	1.3333333	7.3704290
SM	7.6666667	2.0816660	6.0000000	10.0000000	4.3333333	27.1521652
WHT_ASH	1.9600000	0.0900000	1.8700000	2.0500000	0.0081000	4.5918367
WHT PRO	17.3000000	0.6244998	16.8000000	18.0000000	0.3900000	3.6098254
HARD	73.6666667	17.7857621	61.0000000	94.0000000	316.3333333	24.1435685
EXTR	53.8666667	4.4601943	48.8000000	57.2000000	19.8933333	8.2800637
FL_ASH	0.5633333	0.0152753	0.5500000	0.5800000	0.000233333	2.7115833
FL_PRO	17.1000000	0.5196152	16.8000000	17.7000000	0.2700000	3.0386856
MIXO	5.3333333	1.5275252	4.0000000	7.0000000	2.3333333	28.6410981
BAKE ABS	60.8333333	1.7243356	59.3000000	62.7000000	2.9733333	2.8345243
LOAF_VOL	193.6666667	8.1445278	188.0000000	203.0000000	66.3333333	4.2054360

VARIETY=ERA

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	57.6666667	1.2897028	56.6000000	59.1000000	1.6633333	2.2364789
K_WT	23.9000000	0.2000000	23.7000000	24.1000000	0.0400000	0.8368201
LG	10.6666667	4.0414519	6.0000000	13.0000000	16.3333333	37.8886114
SM	9.0000000	2.0000000	7.0000000	11.0000000	4.0000000	22.2222222
WHT ASH	1.8300000	0.0818535	1.7400000	1.9000000	0.0067000	4.4728704
WHT PRO	15.8000000	1.1532563	14.9000000	17.1000000	1.3300000	7.2990902
HARD	63.6666667	11.7189306	55.0000000	77.0000000	137.3333333	18.4066972
EXTR	62.2333333	1.2662280	61.1000000	63.6000000	1.6033333	2.0346459
FL_ASH	0.5066667	0.1011599	0.3900000	0.5700000	0.0102333	19.9657775
FL_PRO	14.9000000	0.9643651	14.2000000	16.0000000	0.9300000	6.4722488
MIXO	3.6666667	1.1547005	3.0000000	5.0000000	1.3333333	31.4918329
BAKE ABS	59.2000000	1.6822604	57.9000000	61.1000000	2.8300000	2.8416561
LOAF VOL	198.6666667	15.8219257	185.0000000	216.0000000	250.3333333	7.9640566

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

TABLE 40

MIDWESTERN REGION

VARIETY=FA987350

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.7666667	0.7505553	59.0000000	60.5000000	0.5633333	1.2558093
K_WT	39.0333333	1.9629909	37.9000000	41.3000000	3.8533333	5.0290117
LG	70.6666667	6.6583281	65.0000000	78.0000000	44.3333333	9.4221624
SM	2.0000000	1.0000000	1.0000000	3.0000000	1.0000000	50.0000000
WHT_ASH	1.7366667	0.0750555	1.6600000	1.8100000	0.0056333	4.3218158
WHT_PRO	16.4333333	1.1930353	15.1000000	17.4000000	1.4233333	7.2598500
HARD	58.3333333	8.6216781	49.0000000	66.0000000	74.3333333	14.7800196
EXTR	57.0333333	6.5683585	50.2000000	63.3000000	43.1433333	11.5167010
FL_ASH	0.5033333	0.0305505	0.4700000	0.5300000	0.000933333	6.0696367
FL_PRO	15.5666667	0.8504901	14.6000000	16.2000000	0.7233333	5.4635335
MIXO	2.6666667	0.5773503	2.0000000	3.0000000	0.3333333	21.6506351
BAKE_ABS	58.0333333	0.6658328	57.3000000	58.6000000	0.4433333	1.1473282
LOAF_VOL	194.0000000	7.9372539	185.0000000	200.0000000	63.0000000	4.0913680

VARIETY=ID367

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	57.0000000	1.6643317	55.1000000	58.2000000	2.7700000	2.9198802
K_WT	25.3666667	2.9160476	22.0000000	27.1000000	8.5033333	11.4955883
LG	11.3333333	6.5064071	5.0000000	18.0000000	42.3333333	57.4094744
SM	7.6666667	2.0816660	6.0000000	10.0000000	4.3333333	27.1521652
WHT_ASH	1.7800000	0.1212436	1.6700000	1.9100000	0.0147000	6.8114358
WHT_PRO	15.7333333	1.2096832	14.8000000	17.1000000	1.4633333	7.6886641
HARD	58.3333333	15.5026879	47.0000000	76.0000000	240.3333333	26.5760365
EXTR	57.4666667	3.7447741	54.1000000	61.5000000	14.0233333	6.5164283
FL_ASH	0.5166667	0.0305505	0.4900000	0.5500000	0.000933333	5.9130009
FL_PRO	15.0666667	1.0785793	14.3000000	16.3000000	1.1633333	7.1587123
MIXO	4.0000000	1.0000000	3.0000000	5.0000000	1.0000000	25.0000000
BAKE_ABS	58.2666667	1.8147543	56.2000000	59.6000000	3.2933333	3.1145670
LOAF_VOL	203.3333333	12.7410099	195.0000000	218.0000000	162.3333333	6.2660704

VARIETY=MAROUIS

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.2666667	1.1547005	58.6000000	60.6000000	1.3333333	1.9483136
K_WT	25.1000000	0.5291503	24.5000000	25.5000000	0.2800000	2.1081684
LG	21.3333333	5.5075705	15.0000000	25.0000000	30.3333333	25.8167369
SM	4.6666667	0.5773503	4.0000000	5.0000000	0.3333333	12.3717915
WHT_ASH	1.8533333	0.0838650	1.8000000	1.9500000	0.0070333	4.5250884
WHT_PRO	16.0000000	0.8717798	15.4000000	17.0000000	0.7600000	5.4486237
HARD	66.0000000	14.7309199	57.0000000	83.0000000	217.0000000	22.3195755
EXTR	55.0333333	3.6896251	51.9000000	59.1000000	13.6133333	6.7043460
FL_ASH	0.5633333	0.0305505	0.5300000	0.5900000	0.000933333	5.4231665
FL_PRO	15.1000000	0.7549834	14.3000000	15.8000000	0.5700000	4.9998904
MIXO	2.6666667	0.5773503	2.0000000	3.0000000	0.3333333	21.6506351
BAKE_ABS	57.5333333	2.5006666	55.0000000	60.0000000	6.2533333	4.3464657
LOAF_VOL	192.0000000	7.0000000	184.0000000	197.0000000	49.0000000	3.6458333

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

MIDWESTERN REGION

TABLE 41

VARIETY=MN87150

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	58.0666667	1.1930353	56.7000000	58.9000000	1.4233333	2.0545959
K_WT	29.2000000	2.9614186	26.4000000	32.3000000	8.7700000	10.1418444
LG	29.6666667	19.7315314	7.0000000	43.0000000	389.3333333	66.5107802
SM	5.0000000	2.6457513	2.0000000	7.0000000	7.0000000	52.9150262
WHT ASH	1.7033333	0.0585947	1.6600000	1.7700000	0.0034333	3.4399992
WHT PRO	15.8000000	0.7937254	14.9000000	16.4000000	0.6300000	5.0235784
HARD	61.0000000	13.4536240	50.0000000	76.0000000	181.0000000	22.0551214
EXTR	58.9666667	4.2193996	55.0000000	63.4000000	17.8033333	7.1555675
FL ASH	0.5000000	0.0346410	0.4600000	0.5200000	0.0012000	6.9282032
FL PRO	15.3333333	0.5033223	14.8000000	15.8000000	0.2533333	3.2825367
MIXO	2.0000000	1.0000000	1.0000000	3.0000000	1.0000000	50.0000000
BAKE ABS	58.0000000	2.1071308	55.8000000	60.0000000	4.4400000	3.6329841
LOAF VOL	196.0000000	5.5677644	190.0000000	201.0000000	31.0000000	2.8406961

VARIETY=MN88170

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	55.8000000	1.7691806	53.9000000	57.4000000	3.1300000	3.1705746
K_WT	27.0333333	3.4019602	23.7000000	30.5000000	11.5733333	12.5843165
LG	17.3333333	14.9777613	5.0000000	34.0000000	224.3333333	86.4101613
SM	6.0000000	2.6457513	3.0000000	8.0000000	7.0000000	44.0958552
WHT_ASH	1.8200000	0.0854400	1.7300000	1.9000000	0.0073000	4.6945076
WHT_PRO	15.6333333	0.9291573	15.0000000	16.7000000	0.8633333	5.9434370
HARD	61.3333333	11.0151411	54.0000000	74.0000000	121.3333333	17.9594692
EXTR	60.8666667	4.1884763	58.3000000	65.7000000	17.5433333	6.8813958
FL_ASH	0.5433333	0.0493288	0.5100000	0.6000000	0.0024333	9.0789255
FL_PRO	14.7000000	0.9165151	13.9000000	15.7000000	0.8400000	6.2347969
MIXO	3.0000000	2.0000000	1.0000000	5.0000000	4.0000000	66.6666667
BAKE ABS	59.2333333	3.2470499	55.5000000	61.4000000	10.5433333	5.4817951
LOAF_VOL	184.0000000	12.7671453	170.0000000	195.0000000	163.0000000	6.9386659

VARIETY=MN88189

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	58.4666667	0.8386497	57.5000000	59.0000000	0.7033333	1.4344066
K_WT	33.7666667	2.3072350	32.1000000	36.4000000	5.3233333	6.8328776
LG	49.3333333	19.5021366	30.0000000	69.0000000	380.3333333	39.5313580
SM	4.6666667	2.0816660	3.0000000	7.0000000	4.3333333	44.6071286
WHT_ASH	1.6833333	0.0503322	1.6300000	1.7300000	0.0025333	2.9900334
WHT_PRO	16.4666667	0.4509250	16.0000000	16.9000000	0.2033333	2.7384108
HARD	64.0000000	5.5677644	59.0000000	70.0000000	31.0000000	8.6996318
EXTR	63.2666667	2.4846194	60.4000000	64.8000000	6.1733333	3.9272171
FL_ASH	0.4433333	0.0115470	0.4300000	0.4500000	0.000133333	2.6045877
FL_PRO	15.9666667	0.3511885	15.6000000	16.3000000	0.1233333	2.1995102
MIXO	4.0000000	1.0000000	3.0000000	5.0000000	1.0000000	25.0000000
BAKE ABS	60.6000000	1.3856406	59.0000000	61.4000000	1.9200000	2.2865357
LOAF_VOL	195.3333333	23.0289673	170.0000000	215.0000000	530.3333333	11.7895737

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

MIDWESTERN REGION

TABLE 42

VARIETY=MN88320

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	61.2666667	1.2858201	59.8000000	62.2000000	1.6533333	2.0987270
K_WT	32.3000000	3.6755952	28.4000000	35.7000000	13.5100000	11.3795517
LG	48.3333333	20.8166600	25.0000000	65.0000000	433.3333333	43.0689517
SM	3.0000000	1.7320508	1.0000000	4.0000000	3.0000000	57.7350269
WHT_ASH	1.7000000	0.0173205	1.6900000	1.7200000	0.000300000	1.0188534
WHT_PRO	15.2333333	0.7637626	14.4000000	15.9000000	0.5833333	5.0137590
HARD	73.3333333	6.5064071	67.0000000	80.0000000	42.3333333	8.8723733
EXTR	61.4333333	0.4041452	61.2000000	61.9000000	0.1633333	0.6578598
FL_ASH	0.4866667	0.0208167	0.4700000	0.5100000	0.000433333	4.2773959
FL_PRO	14.7000000	0.7810250	13.8000000	15.2000000	0.6100000	5.3130950
MIXO	3.0000000	1.0000000	2.0000000	4.0000000	1.0000000	33.3333333
BAKE_ABS	59.9333333	1.5307950	58.2000000	61.1000000	2.3433333	2.5541630
LOAF_VOL	196.6666667	4.1633320	192.0000000	200.0000000	17.3333333	2.1169485

VARIETY=MN88334

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.2333333	1.4843629	58.6000000	61.5000000	2.2033333	2.4643546
K_WT	26.3000000	2.7495454	23.3000000	28.7000000	7.5600000	10.4545453
LG	14.6666667	10.0166528	5.0000000	25.0000000	100.3333333	68.2953600
SM	6.3333333	3.2145503	4.0000000	10.0000000	10.3333333	50.7560566
WHT ASH	1.6500000	0.0984886	1.5400000	1.7300000	0.0097000	5.9690047
WHT_PRO	15.5000000	0.9539392	14.5000000	16.4000000	0.9100000	6.1544465
HARD	64.6666667	20.1080415	48.0000000	87.0000000	404.3333333	31.0949096
EXTR	61.8333333	2.3713569	59.2000000	63.8000000	5.6233333	3.8350785
FL_ASH	0.4300000	0.0529150	0.3700000	0.4700000	0.0028000	12.3058201
FL_PRO	14.7000000	1.1532563	13.6000000	15.9000000	1.3300000	7.8452807
MIXO	1.6666667	1.1547005	1.0000000	3.0000000	1.3333333	69.2820323
BAKE_ABS	56.0666667	2.2030282	54.6000000	58.6000000	4.8533333	3.9293012
LOAF_VOL	180.0000000	10.5830052	168.0000000	188.0000000	112.0000000	5.8794474

VARIETY=ND655

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.2333333	1.8175075	58.2000000	61.7000000	3.3033333	3.0174446
K_WT	29.1666667	4.8003472	24.4000000	34.0000000	23.0433333	16.4583333
LG	33.6666667	23.5867194	9.0000000	56.0000000	556.3333333	70.0595627
SM	6.0000000	4.5825757	2.0000000	11.0000000	21.0000000	76.3762616
WHT ASH	1.7733333	0.0568624	1.7100000	1.8200000	0.0032333	3.2065267
WHT PRO	17.0666667	1.0408330	15.9000000	17.9000000	1.0833333	6.0986309
HARD	78.3333333	9.0737717	70.0000000	88.0000000	82.3333333	11.5835384
EXTR	61.6000000	4.1617304	59.0000000	66.4000000	17.3200000	6.7560559
FL ASH	0.5133333	0.0503322	0.4600000	0.5600000	0.0025333	9.8049798
FL PRO	16.7000000	0.7211103	15.9000000	17.3000000	0.5200000	4.3180255
MIXO	3.3333333	1.1547005	2.0000000	4.0000000	1.3333333	34.6410162
BAKE ABS	62.5000000	3.2000000	59.3000000	65.7000000	10.2400000	5.1200000
LOAF VOL	184.3333333	7.7674535	178.0000000	193.0000000	60.3333333	4.2138084

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

MIDWESTERN REGION

TABLE 43

VARIETY=ND657

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.4666667	1.1150486	58.2000000	60.3000000	1.2433333	1.8750817
K_WT	29.3666667	2.8536526	26.6000000	32.3000000	8.1433333	9.7173188
LG	28.3333333	14.1891978	13.0000000	41.0000000	201.3333333	50.0795215
SM	3.0000000	2.0000000	1.0000000	5.0000000	4.0000000	66.6666667
WHT_ASH	1.7333333	0.0750555	1.6600000	1.8100000	0.0056333	4.3301270
WHT_PRO	16.8333333	1.1930353	15.5000000	17.8000000	1.4233333	7.0873387
HARD	72.0000000	7.8102497	67.0000000	81.0000000	61.0000000	10.8475690
EXTR	59.3333333	4.1789153	55.7000000	63.9000000	17.4633333	7.0431157
FL_ASH	0.5533333	0.0550757	0.4900000	0.5900000	0.0030333	9.9534407
FL_PRO	16.5666667	1.1676187	15.3000000	17.6000000	1.3633333	7.0480000
MIXO	4.0000000	1.0000000	3.0000000	5.0000000	1.0000000	25.0000000
BAKE_ABS	61.8666667	1.3279056	61.1000000	63.4000000	1.7633333	2.1463992
LOAF_VOL	206.0000000	4.0000000	202.0000000	210.0000000	16.0000000	1.9417476

VARIETY=ND662

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.5000000	0.5196152	59.2000000	60.1000000	0.2700000	0.8733029
K_WT	31.3666667	1.5631165	29.7000000	32.8000000	2.4433333	4.9833684
LG	28.6666667	13.2035349	17.0000000	43.0000000	174.3333333	46.0588426
SM	3.3333333	2.0816660	1.0000000	5.0000000	4.3333333	62.4499800
WHT_ASH	1.7233333	0.1021437	1.6500000	1.8400000	0.0104333	5.9271000
WHT_PRO	16.6666667	0.9712535	15.6000000	17.5000000	0.9433333	5.8275209
HARD	75.6666667	15.0111070	61.0000000	91.0000000	225.3333333	19.8384674
EXTR	62.5666667	2.2368132	60.0000000	64.1000000	5.0033333	3.5750877
FL_ASH	0.5000000	0.0608276	0.4300000	0.5400000	0.0037000	12.1655251
FL_PRO	16.2333333	0.8962886	15.2000000	16.8000000	0.8033333	5.5212853
MIXO	7.3333333	0.5773503	7.0000000	8.0000000	0.3333333	7.8729582
BAKE_ABS	61.4666667	1.4224392	60.5000000	63.1000000	2.0233333	2.3141636
LOAF_VOL	182.0000000	3.6055513	178.0000000	185.0000000	13.0000000	1.9810721

VARIETY=ND671

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	61.2666667	0.2309401	61.0000000	61.4000000	0.0533333	0.3769425
K_WT	31.9000000	1.8193405	29.8000000	33.0000000	3.3100000	5.7032619
LG	46.6666667	10.2143690	35.0000000	54.0000000	104.3333333	21.8879335
SM	1.3333333	0.5773503	1.0000000	2.0000000	0.3333333	43.3012702
WHT_ASH	1.7533333	0.0642910	1.6800000	1.8000000	0.0041333	3.6667874
WHT_PRO	17.3000000	0.6000000	16.7000000	17.9000000	0.3600000	3.4682081
HARD	68.0000000	2.6457513	65.0000000	70.0000000	7.0000000	3.8908108
EXTR	61.4000000	4.2567593	57.6000000	66.0000000	18.1200000	6.9328328
FL_ASH	0.4400000	0.0435890	0.4100000	0.4900000	0.0019000	9.9065885
FL_PRO	17.0666667	0.8386497	16.1000000	17.6000000	0.7033333	4.9139631
MIXO	4.6666667	2.0816660	3.0000000	7.0000000	4.3333333	44.6071286
BAKE_ABS	63.2000000	1.8520259	61.4000000	65.1000000	3.4300000	2.9304208
LOAF_VOL	195.6666667	13.2035349	184.0000000	210.0000000	174.3333333	6.7479735

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

MIDWESTERN REGION

TABLE 44

VARIETY=ND672

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.8500000	0.2121320	60.7000000	61.0000000	0.0450000	0.3486147
K_WT	31.2500000	0.0707107	31.2000000	31.3000000	0.0050000	0.2262742
LG	43.0000000	7.0710678	38.0000000	48.0000000	50.0000000	16.4443437
SM	2.5000000	0.7071068	2.0000000	3.0000000	0.5000000	28.2842712
WHT_ASH	1.7600000	0.0848528	1.7000000	1.8200000	0.0072000	4.8211826
WHT_PRO	16.6000000	0.9899495	15.9000000	17.3000000	0.9800000	5.9635512
HARD	83.0000000	2.8284271	81.0000000	85.0000000	8.0000000	3.4077435
EXTR	61.3500000	0.2121320	61.2000000	61.5000000	0.0450000	0.3457735
FL_ASH	0.4950000	0.0212132	0.4800000	0.5100000	0.000450000	4.2854956
FL_PRO	16.3500000	0.6363961	15.9000000	16.8000000	0.4050000	3.8923309
MIXO	5.5000000	0.7071068	5.0000000	6.0000000	0.5000000	12.8564869
BAKE_ABS	62.4000000	1.8384776	61.1000000	63.7000000	3.3800000	2.9462783
LOAF_VOL	199.0000000	5.6568542	195.0000000	203.0000000	32.0000000	2.8426403

VARIETY=N86-0542

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	57.2666667	2.1939310	54.8000000	59.0000000	4.8133333	3.8310786
K_WT	26.7666667	2.5794056	23.9000000	28.9000000	6.6533333	9.6366337
LG	20.0000000	12.2882057	6.0000000	29.0000000	151.0000000	61.4410286
SM	8.3333333	2.5166115	6.0000000	11.0000000	6.3333333	30.1993377
WHT_ASH	1.8633333	0.1193035	1.7300000	1.9600000	0.0142333	6.4026942
WHT_PRO	15.6666667	1.1239810	14.7000000	16.9000000	1.2633333	7.1743469
HARD	67.0000000	13.0000000	54.0000000	80.0000000	169.0000000	19.4029851
EXTR	61.2666667	3.9068316	57.5000000	65.3000000	15.2633333	6.3767654
FL_ASH	0.4933333	0.0057735	0.4900000	0.5000000	0.000033333	1.1703046
FL_PRO	15.3333333	1.0115994	14.7000000	16.5000000	1.0233333	6.5973874
MIXO	3.3333333	0.5773503	3.0000000	4.0000000	0.3333333	17.3205081
BAKE_ABS	58.9666667	2.3180452	56.5000000	61.1000000	5.3733333	3.9311111
LOAF_VOL	200.6666667	12.4230968	193.0000000	215.0000000	154.3333333	6.1909120

VARIETY=N87-0306

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	58.2000000	1.4000000	57.2000000	59.8000000	1.9600000	2.4054983
K_WT	29.5666667	2.8041636	27.8000000	32.8000000	7.8633333	9.4842060
LG	33.3333333	11.5036226	22.0000000	45.0000000	132.3333333	34.5108679
SM	4.0000000	2.0000000	2.0000000	6.0000000	4.0000000	50.0000000
WHT_ASH	1.7333333	0.0757188	1.6800000	1.8200000	0.0057333	4.3683910
WHT_PRO	16.4666667	0.7767453	15.6000000	17.1000000	0.6033333	4.7170770
HARD	62.0000000	8.5440037	53.0000000	70.0000000	73.0000000	13.7806512
EXTR	62.7000000	3.8974351	58.4000000	66.0000000	15.1900000	6.2160049
FL_ASH	0.4500000	0.0556776	0.4000000	0.5100000	0.0031000	12.3728097
FL_PRO	16.2333333	0.5507571	15.6000000	16.6000000	0.3033333	3.3927539
MIXO	5.6666667	1.5275252	4.0000000	7.0000000	2.3333333	26.9563276
BAKE_ABS	59.8333333	3.3381632	56.0000000	62.1000000	11.1433333	5.5791028
LOAF_VOL	206.6666667	10.2143690	195.0000000	214.0000000	104.3333333	4.9424366

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

MIDWESTERN REGION

TABLE 45

VARIETY=N87-467

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	58.4666667	1.1718931	57.6000000	59.8000000	1.3733333	2.0043781
K_WT	31.2333333	2.6083200	29.3000000	34.2000000	6.8033333	8.3510780
LG	28.3333333	13.0511813	18.0000000	43.0000000	170.3333333	46.0629928
SM	3.3333333	3.2145503	1.0000000	7.0000000	10.3333333	96.4365076
WHT ASH	1.7700000	0.0721110	1.6900000	1.8300000	0.0052000	4.0740692
WHT PRO	15.5000000	0.8888194	14.5000000	16.2000000	0.7900000	5.7343190
HARD	47.0000000	6.5574385	41.0000000	54.0000000	43.0000000	13.9519969
EXTR	61.5666667	2.8746014	59.3000000	64.8000000	8.2633333	4.6690873
FL ASH	0.4700000	0.0400000	0.4300000	0.5100000	0.0016000	8.5106383
FL_PRO	14.9666667	0.8504901	14.1000000	15.8000000	0.7233333	5.6825616
MIXO	3.6666667	1.5275252	2.0000000	5.0000000	2.3333333	41.6597790
BAKE ABS	59.8333333	1.9857828	57.6000000	61.4000000	3.9433333	3.3188570
LOAF VOL	213.6666667	19.6044213	193.0000000	232.0000000	384.3333333	9.1752362

VARIETY=N88-3034

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	57.1000000	1.0535654	56.1000000	58.2000000	1.1100000	1.8451232
K_WT	27.1666667	2.7537853	24.5000000	30.0000000	7.5833333	10.1366329
LG	20.0000000	13.1148770	8.0000000	34.0000000	172.0000000	65.5743852
SM	5.3333333	2.0816660	3.0000000	7.0000000	4.3333333	39.0312375
WHT_ASH	1.7300000	0.4396590	1.2400000	2.0900000	0.1933000	25.4138126
WHT_PRO	17.5000000	0.5567764	16.9000000	18.0000000	0.3100000	3.1815796
HARD	72.6666667	5.5075705	69.0000000	79.0000000	30.3333333	7.5792255
EXTR	61.8333333	2.3501773	59.5000000	64.2000000	5.5233333	3.8008258
FL_ASH	0.5166667	0.0230940	0.4900000	0.5300000	0.000533333	4.4698085
FL_PRO	17.3000000	0.2645751	17.0000000	17.5000000	0.0700000	1.5293360
MIXO	2.3333333	0.5773503	2.0000000	3.0000000	0.3333333	24.7435830
BAKE_ABS	59.9000000	1.3076697	59.0000000	61.4000000	1.7100000	2.1830880
LOAF VOL	207.3333333	3.0550505	204.0000000	210.0000000	9.3333333	1.4734970

VARIETY=N88-3136

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	61.0333333	0.4509250	60.6000000	61.5000000	0.2033333	0.7388175
K_WT	29.8666667	2.1197484	27.6000000	31.8000000	4.4933333	7.0973719
LG	36.0000000	13.8924440	20.0000000	45.0000000	193.0000000	38.5901222
SM	2.6666667	0.5773503	2.0000000	3.0000000	0.3333333	21.6506351
WHT_ASH	1.7366667	0.0665833	1.6800000	1.8100000	0.0044333	3.8339701
WHT_PRO	16.6666667	0.2516611	16.4000000	16.9000000	0.0633333	1.5099669
HARD	66.0000000	2.6457513	63.0000000	68.0000000	7.0000000	4.0087141
EXTR	59.4333333	3.4019602	56.1000000	62.9000000	11.5733333	5.7239936
FL ASH	0.5033333	0.0351188	0.4700000	0.5400000	0.0012333	6.9772541
FL_PRO	16.3666667	0.2081666	16.2000000	16.6000000	0.0433333	1.2718937
MIXO	3.0000000	1.0000000	2.0000000	4.0000000	1.0000000	33.3333333
BAKE ABS	59.4000000	0.8544004	58.6000000	60.3000000	0.7300000	1.4383845
LOAF VOL	208.3333333	7.2341781	200.0000000	213.0000000	52.3333333	3.4724055

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

MIDWESTERN REGION

TABLE 46

VARIETY=SD3055

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.3333333	1.0598742	59.2000000	61.3000000	1.1233333	1.7566976
K_WT	31.2333333	2.3501773	28.9000000	33.6000000	5.5233333	7.5245805
LG	57.6666667	21.0317221	36.0000000	78.0000000	442.3333333	36.4711943
SM	2.0000000	1.0000000	1.0000000	3.0000000	1.0000000	50.0000000
WHT_ASH	1.7433333	0.0550757	1.6800000	1.7800000	0.0030333	3.1592183
WHT_PRO	16.9333333	1.0016653	15.8000000	17.7000000	1.0033333	5.9153461
HARD	67.3333333	1.5275252	66.0000000	69.0000000	2.3333333	2.2686018
EXTR	61.1333333	3.5641736	58.2000000	65.1000000	12.7033333	5.8301640
FL_ASH	0.4966667	0.0351188	0.4600000	0.5300000	0.0012333	7.0709086
FL_PRO	16.7666667	1.0408330	15.6000000	17.6000000	1.0833333	6.2077515
MIXO	3.0000000	1.7320508	2.0000000	5.0000000	3.0000000	57.7350269
BAKE_ABS	60.9666667	0.7637626	60.3000000	61.8000000	0.5833333	1.2527544
LOAF_VOL	199.6666667	10.0166528	192.0000000	211.0000000	100.3333333	5.0166875

VARIETY=SD3056

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.4666667	0.7637626	58.8000000	60.3000000	0.5833333	1.2843542
K_WT	34.9000000	2.5632011	32.5000000	37.6000000	6.5700000	7.3444158
LG	59.3333333	15.5670592	43.0000000	74.0000000	242.3333333	26.2366167
SM	1.3333333	1.5275252	0	3.0000000	2.3333333	114.5643924
WHT_ASH	1.7266667	0.0208167	1.7100000	1.7500000	0.000433333	1.2055981
WHT_PRO	16.8000000	1.0148892	15.7000000	17.7000000	1.0300000	6.0410069
HARD	78.3333333	9.0737717	70.0000000	88.0000000	82.3333333	11.5835384
EXTR	58.0000000	4.0730824	53.3000000	60.5000000	16.5900000	7.0225558
FL_ASH	0.5833333	0.0577350	0.5500000	0.6500000	0.0033333	9.8974332
FL_PRO	16.1000000	0.9848858	15.0000000	16.9000000	0.9700000	6.1173030
MIXO	2.6666667	1.1547005	2.0000000	4.0000000	1.3333333	43.3012702
BAKE_ABS	61.3666667	0.7505553	60.5000000	61.8000000	0.5633333	1.2230668
LOAF_VOL	197.6666667	4.5092498	193.0000000	202.0000000	20.3333333	2.2812393

VARIETY=SD3080

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	61.3666667	0.9451631	60.3000000	62.1000000	0.8933333	1.5401898
K_WT	31.8333333	2.3501773	29.5000000	34.2000000	5.5233333	7.3827559
LG	40.6666667	14.9777613	24.0000000	53.0000000	224.3333333	36.8305606
SM	1.6666667	2.0816660	0	4.0000000	4.3333333	124.8999600
WHT_ASH	1.6566667	0.0832666	1.5900000	1.7500000	0.0069333	5.0261553
WHT_PRO	17.2000000	0.2000000	17.0000000	17.4000000	0.0400000	1.1627907
HARD	71.0000000	4.3588989	66.0000000	74.0000000	19.0000000	6.1392943
EXTR	59.9333333	2.9670412	56.8000000	62.7000000	8.8033333	4.9505693
FL_ASH	0.4866667	0.0115470	0.4800000	0.5000000	0.000133333	2.3726723
FL_PRO	17.0666667	0.0577350	17.0000000	17.1000000	0.0033333	0.3382912
MIXO	5.3333333	2.5166115	3.0000000	8.0000000	6.3333333	47.1864652
BAKE_ABS	62.1000000	1.1789826	61.1000000	63.4000000	1.3900000	1.8985227
LOAF_VOL	207.0000000	7.5498344	200.0000000	215.0000000	57.0000000	3.6472630

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

TABLE 47 MIDWESTERN REGION

VARIETY=SD8072

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	61.2000000	0.5000000	60.7000000	61.7000000	0.2500000	0.8169935
K_WT	33.5666667	0.6506407	32.9000000	34.2000000	0.4233333	1.9383537
LG	55.0000000	6.0827625	48.0000000	59.0000000	37.0000000	11.0595682
SM	1.0000000	1.0000000	0	2.0000000	1.0000000	100.0000000
WHT_ASH	1.7000000	0.0624500	1.6500000	1.7700000	0.0039000	3.6735282
WHT_PRO	16.6333333	0.8082904	15.7000000	17.1000000	0.6533333	4.8594612
HARD	82.0000000	12.2882057	73.0000000	96.0000000	151.0000000	14.9856167
EXTR	62.2000000	2.5942244	59.3000000	64.3000000	6.7300000	4.1707787
FL_ASH	0.5166667	0.0230940	0.4900000	0.5300000	0.000533333	4.4698085
FL_PRO	16.2333333	0.5686241	15.6000000	16.7000000	0.3233333	3.5028177
MIXO	3.6666667	1.5275252	2.0000000	5.0000000	2.3333333	41.6597790
BAKE_ABS	60.8333333	1.4189198	59.3000000	62.1000000	2.0133333	2.3324709
LOAF_VOL	180.0000000	10.0000000	170.0000000	190.0000000	100.0000000	5.5555556

VARIETY=SD8073

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.5666667	0.7505553	59.7000000	61.0000000	0.5633333	1.2392218
K_WT	32.0333333	1.8147543	30.1000000	33.7000000	3.2933333	5.6652061
LG	44.0000000	15.6204994	26.0000000	54.0000000	244.0000000	35.5011349
SM	1.0000000	1.0000000	0	2.0000000	1.0000000	100.0000000
WHT_ASH	1.7200000	0.0854400	1.6400000	1.8100000	0.0073000	4.9674440
WHT_PRO	16.0000000	0.9539392	14.9000000	16.6000000	0.9100000	5.9621200
HARD	81.0000000	6.0827625	74.0000000	85.0000000	37.0000000	7.5095834
EXTR	62.5333333	3.0664855	59.9000000	65.9000000	9.4033333	4.9037615
FL_ASH	0.5300000	0.0100000	0.5200000	0.5400000	0.000100000	1.8867925
FL_PRO	15.5333333	0.8326664	14.6000000	16.2000000	0.6933333	5.3605133
MIXO	4.0000000	1.0000000	3.0000000	5.0000000	1.0000000	25.0000000
BAKE_ABS	61.0000000	1.3228757	60.0000000	62.5000000	1.7500000	2.1686486
LOAF_VOL	183.6666667	5.5075705	178.0000000	189.0000000	30.3333333	2.9986772

VARIETY=SD8074

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.5666667	0.4932883	60.0000000	60.9000000	0.2433333	0.8144551
K_WT	30.7333333	1.2342339	29.7000000	32.1000000	1.5233333	4.0159455
LG	40.6666667	12.5830574	29.0000000	54.0000000	158.3333333	30.9419444
SM	2.0000000	1.0000000	1.0000000	3.0000000	1.0000000	50.0000000
WHT_ASH	1.6900000	0.0700000	1.6200000	1.7600000	0.0049000	4.1420118
WHT_PRO	16.5333333	0.9291573	15.5000000	17.3000000	0.8633333	5.6199032
HARD	77.6666667	10.5987421	68.0000000	89.0000000	112.3333333	13.6464490
EXTR	59.4333333	2.9955523	56.1000000	61.9000000	8.9733333	5.0401889
FL_ASH	0.5433333	0.0404145	0.5000000	0.5800000	0.0016333	7.4382550
FL_PRO	15.7666667	0.4163332	15.3000000	16.1000000	0.1733333	2.6405911
MIXO	3.3333333	0.5773503	3.0000000	4.0000000	0.3333333	17.3205081
BAKE_ABS	60.8000000	0.8660254	60.3000000	61.8000000	0.7500000	1.4243839
LOAF_VOL	186.0000000	2.6457513	184.0000000	189.0000000	7.0000000	1.4224469

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

MIDWESTERN REGION

TABLE 48

VARIETY=STOA

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.3666667	2.0033306	57.3000000	61.3000000	4.0133333	3.3745040
K_WT	27.1333333	2.0599353	24.8000000	28.7000000	4.2433333	7.5918990
LG	16.6666667	9.2376043	6.0000000	22.0000000	85.3333333	55.4256258
SM	3.3333333	3.2145503	1.0000000	7.0000000	10.3333333	96.4365076
WHT_ASH	1.8333333	0.1171893	1.7000000	1.9200000	0.0137333	6.3921439
WHT_PRO	16.4000000	1.0000000	15.4000000	17.4000000	1.0000000	6.0975610
HARD	65.3333333	4.9328829	62.0000000	71.0000000	24.3333333	7.5503309
EXTR	61.7333333	2.8005952	58.9000000	64.5000000	7.8433333	4.5366013
FL_ASH	0.4733333	0.0351188	0.4400000	0.5100000	0.0012333	7.4194745
FL_PRO	15.7333333	0.6806859	15.2000000	16.5000000	0.4633333	4.3263936
MIXO	4.0000000	1.7320508	2.0000000	5.0000000	3.0000000	43.3012702
BAKE_ABS	60.8666667	1.6010413	59.3000000	62.5000000	2.5633333	2.6304074
LOAF_VOL	193.0000000	7.2111026	187.0000000	201.0000000	52.0000000	3.7363226

VARIETY=XW398A4

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.7000000	1.3747727	58.2000000	60.9000000	1.8900000	2.3028019
K_WT	31.3333333	3.2316147	28.9000000	35.0000000	10.4433333	10.3136638
LG	30.3333333	16.0416126	15.0000000	47.0000000	257.3333333	52.8844370
SM	3.3333333	2.0816660	1.0000000	5.0000000	4.3333333	62.4499800
WHT_ASH	1.8266667	0.1026320	1.7400000	1.9400000	0.0105333	5.6185417
WHT_PRO	16.1333333	0.5686241	15.5000000	16.6000000	0.3233333	3.5245294
HARD	55.0000000	6.5574385	48.0000000	61.0000000	43.0000000	11.9226155
EXTR	59.9333333	4.9095146	55.9000000	65.4000000	24.1033333	8.1916261
FL_ASH	0.5000000	0.0519615	0.4400000	0.5300000	0.0027000	10.3923048
FL_PRO	16.2000000	0.3605551	15.9000000	16.6000000	0.1300000	2.2256489
MIXO	6.0000000	1.7320508	4.0000000	7.0000000	3.0000000	28.8675135
BAKE_ABS	60.7333333	0.6350853	60.0000000	61.1000000	0.4033333	1.0456948
LOAF_VOL	205.6666667	8.0208063	198.0000000	214.0000000	64.3333333	3.8999058

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=MONTANA STATION=HAVRE NURSERY=UNIFORM

TABLE 49

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
BUTTE 86	S	58.5	27.9	12	5	1.63	16.3	70	4	61.1	0.47	15.7	5	4	59.6	2
CHRIS		56.5	20.9	3	15	1.76	16.4	73	3	62.4	0.48	16.2	5	4	58.6	3
ERA	S	53.4	20.0	3	21	1.82	15.3	60	2	61.2	0.54	14.7	5	4	57.6	3
MARQUIS		56.5	23.3	6	8	1.78	16.3	72	3	59.3	0.55	14.7	5	4	58.2	3
STOA	S	55.5	22.4	3	14	1.79	16.0	63	3	61.8	0.48	15.8	5	4	61.4	5
SD3055		59.1	30.2	22	2	1.61	15.7	60	4	63.1	0.46	15.7	5	4	60.8	3
SD3056		56.9	28.7	18	5	1.72	15.5	66	3	63.7	0.51	15.0	5	4	61.8	4
SD3080		60.7	29.8	15	3	1.55	16.1	66	4	62.1	0.42	15.9	5	4	62.5	4
SD8072		57.9	26.4	13	3	1.68	15.8	74	4	62.7	0.47	15.6	5	4	60.0	3
SD8073		56.2	24.2	6	7	1.74	15.8	69	3	63.8	0.54	15.5	5	4	60.8	4
SD8074		58.0	25.3	10	5	1.63	16.0	74	4	63.8	0.50	15.7	5	4	60.8	5
MN87150		56.9	25.8	7	6	1.66	15.0	57	3	62.3	0.45	14.5	5	4	57.6	2
MN88170		50.2	21.1	1	17	1.88	15.9	58	2	63.8	0.57	15.4	5	4	60.5	2
MN88189		57.1	30.3	29	2	1.63	15.5	67	4	66.0	0.42	15.1	5	4	59.6	3
MN88320		58.7	25.5	9	7	1.64	14.3	73	4	63.5	0.46	13.5	5	4	60.0	3
MN88334		55.3	20.2	2	24	1.71	15.5	60	2	63.7	0.47	14.9	5	4	59.3	3
ND655		59.3	25.6	11	6	1.68	16.2	67	4	63.9	0.50	16.1	5	4	60.3	3
ND657		56.1	25.0	6	8	1.72	16.6	67	3	63.8	0.51	16.5	5	4	62.7	4
ND662		56.6	25.4	7	9	1.72	15.8	64	3	64.9	0.51	15.4	5	4	58.6	5
ND671		60.1	26.7	11	3	1.62	16.1	68	4	62.1	0.42	16.2	5	4	60.5	4
ND672		55.2	21.8	6	14	1.82	16.0	75	3	62.0	0.55	15.6	5	4	52.7	7
XW398A4		58.5	29.8	13	6	1.72	15.2	62	4	64.4	0.51	15.1	5	4	60.0	3
N86-0542		53.6	22.3	5	13	1.86	14.8	53	3	67.8	0.46	14.5	5	4	60.3	5
N87-0306		54.6	24.7	8	9	1.69	15.7	58	3	65.0	0.45	15.0	5	4	60.3	5
N88-3136		57.8	22.5	6	8	1.79	15.9	55	4	65.6	0.50	15.7	5	4	59.3	4
N88-3034		54.5	22.5	4	11	1.88	16.5	63	3	64.4	0.52	16.4	5	4	59.6	3
N87-467		56.0	26.5	7	8	1.82	14.9	45	3	64.6	0.47	14.3	5	4	57.6	3
FA987350		57.4	31.4	30	2	1.69	15.5	46	4	61.1	0.47	14.8	5	4	57.6	3
CI982309		52.2	22.9	8	11	1.87	17.4	78	3	56.2	0.59	17.1	5	2	60.3	5
AC-MINTO		57.0	26.3	12	5	1.70	16.4	73	4	64.4	0.49	16.1	5	4	60.0	3
BW148		59.0	27.9	18	3	1.70	16.6	71	4	62.7	0.57	16.3	5	4	59.6	3
ID0367		51.8	21.7	3	19	1.83	15.6	51	2	62.7	0.49	15.4	5	4	59.6	7

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=MONTANA STATION=HAVRE NURSERY=UNIFORM

TABLE 49 (CONT)

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
BUTTE 86	S	59.6	4.00	7	80	90	188	2	3.3									MI	MJ					
CHRIS		58.6	3.50	7	80	85	183	2	3.0		MJ	MI	MI						MJ					
ERA	S	57.6	5.50	7	80	85	198	2	2.7		MJ	MI	MJ						MJ					
MARQUIS		58.2	4.25	7	85	85	184	2	3.0		MJ		MI						MJ					
STOA	S	61.4	5.25	7	80	85	188	3	3.3		MJ		MI						MI					
SD3055		60.8	4.00	9	80	85	189	3	3.7										MI					
SD3056		61.8	4.25	9	80	90	203	3	3.3		MJ								MI					
SD3080		62.5	4.25	9	80	85	206	4	4.0															
SD8072		60.0	5.50	7	80	85	184	2	3.3		MI								MJ					
SD8073		60.8	5.25	7	80	85	180	3	3.3		MJ								MI					
SD8074		60.8	5.75	7	75	85	168	1	3.0										MI	MI		MI		MI
MN87150		57.6	3.50	5	85	85	182	2	3.0		MJ							MI	MJ		MI			
MN88170		60.5	2.50	2	80	75	182	1	2.3		MJ	MI	MJ			MI		MI	MI	MI	MJ		MI	
MN88189		59.6	3.75	7	80	90	197	2	3.3		MI								MJ					
MN88320		60.0	4.25	7	85	85	198	2	3.3										MJ					
MN88334		59.3	4.25	7	80	85	188	2	2.7		MJ	MI	MJ						MJ					
ND655		60.3	4.00	7	80	85	195	2	3.3										MJ					
ND657		62.7	4.25	9	80	85	212	4	3.7		MJ		MI											
ND662		58.6	7.00	7	80	85	198	1	2.7		MJ		MI						MJ	MI				
ND671		60.5	4.75	7	85	85	193	3	3.7										MI					
ND672		62.7	6.00	9	80	85	206	3	3.3		MJ		MI					MI		MI				
XW398A4		60.0	7.00	9	85	90	181	1	3.0										MJ	MI				
N86-0542		60.3	5.00	9	75	85	200	2	3.0		MJ		MI						MJ			MI		
N87-0306		60.3	5.75	9	85	75	190	1	2.7		MJ		MI						MJ	MI				MI
N88-3136		59.3	5.75	9	80	85	194	1	3.0		MI		MI						MJ	MI				
N88-3034		59.6	3.50	9	80	85	208	2	3.0		MJ		MI						MJ					
N87-467		57.6	7.25	9	85	85	195	1	2.7		MJ		MI						MJ	MI				
FA987350		57.6	5.25	7	85	85	202	2	3.3		MI								MJ					
CI982309		62.3	6.00	7	80	80	195	3	2.7		MJ		MI		MJ	MI				MI				MI
AC-MINTO		60.0	3.00	2	80	90	188	1	3.0		MI								MJ		MJ			
BW148		59.6	3.00	5	85	85	182	2	3.3							MI			MJ		MI			
ID0367		59.6	7.00	9	80	75	203	1	2.3		MJ		MJ					MI	MJ	MI				MI

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	21.3	8	13.9	59.3	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	75	80	170
MAJOR FAULTING VALUES	56.9	18.3	18	12.9	57.3	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	50	50	160

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=MONTANA STATION=BOZEMAN NURSERY=UNIFORM

TABLE 50

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
ND597	S	62.2	30.1	25	0	1.29	16.4	67	4	59.6	0.44	15.1	5	4	59.3	2
CI 13751		58.2	21.6	6	14	1.52	17.2	72	4	57.9	0.51	17.8	5	4	61.1	3
CI 13986	S	58.6	22.6	9	13	1.46	15.2	67	4	57.1	0.54	14.2	5	4	57.6	3
CI 3651		61.8	26.2	19	1	1.41	16.2	64	4	58.0	0.48	15.8	5	4	59.3	3
ND582	S	61.4	24.9	8	6	1.43	15.9	65	4	59.7	0.45	15.7	5	4	60.5	4
SD 3055		62.2	30.1	24	2	1.45	15.7	56	4	58.8	0.51	15.8	5	4	59.3	3
SD 3056		63.0	34.4	49	1	1.35	15.2	68	4	57.5	0.51	14.4	5	4	59.6	2
SD 3080		64.0	31.0	30	0	1.29	16.7	57	4	61.7	0.44	16.6	5	4	60.5	3
SD 8072		63.5	29.2	27	1	1.34	15.8	65	4	56.4	0.54	15.2	5	3	59.0	2
SD 8073		61.9	27.5	17	3	1.40	15.9	66	4	61.8	0.51	15.6	5	4	61.8	4
SD 8074		63.3	28.2	18	1	1.34	16.2	69	4	60.6	0.48	15.7	5	4	60.3	4
MN 087150		61.8	29.6	23	0	1.30	14.4	60	4	64.5	0.43	13.7	5	4	56.5	1
MN 088170		58.6	25.6	14	4	1.38	15.3	60	4	63.2	0.48	14.5	5	4	59.3	2
MN 088189		61.7	29.8	27	2	1.45	15.8	68	4	60.7	0.46	15.1	5	4	59.6	2
MN 088320		63.1	28.2	27	3	1.37	14.4	69	4	59.9	0.50	13.1	5	4	58.6	2
MN 088334		60.6	22.6	7	15	1.36	15.3	67	4	62.0	0.46	14.6	5	4	59.6	2
ND655		60.6	22.0	7	13	1.58	17.3	73	4	61.5	0.51	17.1	5	4	61.4	2
ND 657		63.4	30.5	26	1	1.43	16.0	72	4	61.7	0.49	15.7	5	4	63.7	3
ND 662		59.9	23.6	8	15	1.46	16.5	70	4	62.7	0.50	16.2	5	4	61.8	7
ND 671		64.1	25.2	13	3	1.38	16.9	62	4	60.2	0.43	16.9	5	4	63.1	5
ND 672		59.2	21.9	10	17	1.58	16.7	86	3	52.6	0.63	16.0	5	1	62.5	5
XW 398A4		60.8	27.0	17	6	1.47	15.9	65	4	56.6	0.58	15.4	5	3	60.8	3
N86-0542		60.9	26.6	15	7	1.48	14.6	62	4	59.6	0.47	13.7	5	4	58.6	2
N87-0306		60.0	25.8	19	6	1.48	16.0	69	4	61.3	0.46	15.4	5	4	61.8	4
N88-3136		62.8	25.0	17	2	1.42	16.3	68	4	62.6	0.47	16.3	5	4	60.5	2
N88-3034		61.2	26.9	18	3	1.46	16.0	63	4	65.1	0.44	16.2	5	4	57.9	2
N87-467		58.5	25.1	9	14	1.59	15.8	50	4	59.0	0.53	15.2	5	4	60.8	3
FA987350		60.6	32.9	39	1	1.36	15.7	50	4	58.7	0.46	15.2	5	4	57.9	2
CI982309		58.2	26.8	18	3	1.41	16.3	71	4	55.9	0.50	16.0	5	3	59.3	4
AC-MINTO		59.5	25.7	15	3	1.53	18.1	89	4	61.0	0.50	18.2	5	4	60.0	3
BW148		62.7	29.3	28	0	1.40	16.7	85	4	61.3	0.46	16.5	5	4	60.0	3
ID367		60.9	27.7	16	4	1.29	14.6	61	4	61.0	0.43	13.7	5	4	57.6	3

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=MONTANA STATION=BOZEMAN NURSERY=UNIFORM

TABLE 50 (CONT)

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
ND597	S	59.3	2.50	9	85	85	197	1	3.0									MI	MJ	MI				
CI 13751		61.1	2.75	9	80	85	213	2	3.3		MI	MI							MI	MI				
CI 13986	S	57.6	4.25	9	80	85	221	2	3.3		MI	MI							MJ					
CI 3651		59.3	2.75	9	80	85	207	1	3.0										MJ	MI				
ND582	S	60.5	3.75	9	90	80	200	3	3.7										MI					MI
SD 3055		59.3	3.75	7	80	85	218	2	3.3										MJ					
SD 3056		59.6	2.75	9	90	85	206	1	3.0									MI	MJ	MI				
SD 3080		60.5	3.00	7	80	85	216	3	3.7										MI					
SD 8072		59.0	3.00	7	80	80	195	2	3.0					MI				MI	MJ					MI
SD 8073		61.8	3.25	7	85	80	205	3	3.7										MI					MI
SD 8074		60.3	4.00	7	75	80	208	2	3.3										MJ				MI	MI
MN 087150		56.5	2.50	7	80	85	213	1	3.0									MJ	MJ	MI				
MN 088170		59.3	2.00	5	80	85	194	1	3.0									MI	MJ	MI	MI			
MN 088189		59.6	3.75	9	80	85	216	2	3.3									MI	MJ					
MN 088320		58.6	3.00	7	90	80	202	2	3.3									MI	MJ					MI
MN 088334		59.6	3.00	7	75	85	203	2	3.3		MI	MI						MI	MJ				MI	
ND655		61.4	3.50	9	75	85	208	3	3.7		MI	MI						MI	MI				MI	
ND 657		63.7	3.75	9	85	75	231	4	4.0															MI
ND 662		61.8	7.25	9	80	85	195	2	3.3		MI	MI						MI	MI	MI				
ND 671		63.1	4.00	9	85	80	216	4	4.0															MI
ND 672		62.5	4.75	9	80	80	230	4	2.7		MI	MJ		MJ	MJ									MI
XW 398A4		60.8	6.00	9	85	80	214	2	3.0					MI	MI				MI	MI				MI
N86-0542		58.6	4.75	9	80	80	202	2	3.3									MI	MJ					MI
N87-0306		61.8	4.50	9	80	75	218	3	3.7										MI					MI
N88-3136		60.5	3.75	9	80	80	223	3	3.7									MI	MI					MI
N88-3034		57.9	3.00	9	80	85	208	2	3.3									MI	MJ					
N87-467		60.8	6.50	9	80	80	223	2	3.3			MI							MI	MI					MI
FA987350		57.9	4.50	5	85	80	222	2	3.3									MI	MJ		MI			MI
CI982309		59.3	5.25	9	90	85	221	2	3.0					MI					MJ					
AC-MINTO		60.0	2.50	9	85	85	205	1	3.0										MJ	MI				
BW148		60.0	3.00	9	90	80	189	2	3.3										MJ					MI
ID367		57.6	5.00	9	90	75	210	2	3.3										MJ					MI

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	23.8	8	13.9	56.7	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	75	80	185
MAJOR FAULTING VALUES	56.9	20.8	18	12.9	54.7	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	50	50	175

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=IDAHO STATION=ABERDEEN NURSERY=UNIFORM

TABLE 51

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
BUTTE	S	59.4	43.7	90	1	1.66	14.2	81	4	55.7	0.51	13.6	5	3	53.8	1
CHRIS		57.4	35.6	70	1	1.62	13.4	72	3	54.1	0.53	13.0	5	3	56.5	1
ERA	S	59.0	37.6	77	0	1.54	11.8	71	2	64.4	0.47	10.7	5	2	53.2	1
MARQUIS		58.5	42.0	91	0	1.66	15.4	76	4	55.8	0.53	15.6	5	3	61.1	3
STOA	S	58.6	38.6	80	0	1.64	13.8	83	3	54.1	0.49	13.5	5	3	58.2	2
SD3055		59.3	48.3	95	0	1.68	15.3	74	4	60.6	0.47	15.3	5	4	61.1	2
SD3056		59.4	47.4	94	0	1.58	14.4	76	4	51.7	0.57	13.7	5	2	59.0	2
SD3080		60.3	42.2	86	1	1.69	16.0	75	4	55.5	0.49	15.5	5	3	61.4	2
SD8072		59.4	44.1	93	0	1.62	14.4	88	4	59.5	0.52	14.3	5	4	59.0	1
SD8073		58.7	45.5	92	1	1.53	14.0	85	4	50.0	0.58	12.7	5	1	53.5	2
SD8074		59.0	38.9	90	0	1.63	14.7	76	4	51.9	0.51	14.0	5	2	60.0	3
MN87150		58.2	42.0	89	1	1.54	13.1	74	3	45.7	0.53	11.6	5	1	52.2	1
MN88170		56.6	44.2	90	0	1.66	12.9	55	1	59.7	0.53	11.6	5	2	56.2	1
MN88189		58.2	48.8	94	1	1.53	13.4	63	3	56.5	0.50	12.3	5	2	57.6	2
MN88320		59.6	44.6	94	0	1.57	13.2	86	3	59.0	0.49	12.4	5	2	59.6	1
MN88334		59.2	37.5	80	1	1.56	13.9	65	3	63.5	0.41	13.0	5	4	56.2	1
ND655		60.0	41.3	88	1	1.73	15.2	83	4	47.8	0.53	14.4	5	2	58.2	1
ND657		58.6	39.1	82	1	1.73	14.8	76	4	54.2	0.51	13.9	5	3	59.6	2
ND662		58.7	42.2	87	0	1.66	15.3	76	4	55.7	0.52	15.0	5	3	60.5	1
ND671		59.4	39.4	86	1	1.69	16.6	82	4	52.4	0.46	16.8	5	2	64.0	3
ND672		61.0	42.4	91	1	1.53	13.8	80	3	53.3	0.49	12.9	5	1	59.3	2
XW398A4		60.1	48.1	93	0	1.69	14.1	70	4	55.6	0.64	13.7	5	2	58.6	1
N86-542		59.4	40.2	83	1	1.59	11.0	62	2	64.4	0.43	10.3	5	2	54.6	1
N87-0306		59.2	44.8	89	1	1.56	12.4	65	2	64.6	0.44	11.2	5	2	57.9	1
N88-3136		57.8	39.1	86	0	1.55	14.1	60	4	54.0	0.55	13.5	5	3	57.3	1
N88-3034		56.0	36.6	79	1	1.71	14.6	77	3	57.1	0.50	14.5	5	4	57.6	1
N87-467		59.0	47.4	90	0	1.58	13.2	63	3	65.6	0.46	12.4	5	2	59.0	2
FA987-350		59.0	54.9	96	0	1.70	15.3	71	4	53.5	0.49	14.8	5	2	60.3	3
CI982-309		59.4	42.6	90	1	1.59	14.2	68	4	50.5	0.49	13.9	5	2	58.2	1
AC-MINTO		57.4	42.0	89	1	1.70	14.5	77	4	58.9	0.55	14.2	5	4	57.6	1
BW148		58.7	38.0	85	0	1.76	16.2	77	4	54.2	0.57	16.1	5	3	60.8	2
ID0367		59.1	42.2	84	1	1.56	12.6	72	2	64.4	0.41	11.9	5	2	58.2	3
*COPPER		59.4	43.7	88	1	1.60	12.5	62	2	56.3	0.44	11.5	5	2	57.6	3
*PONDERA		60.0	38.0	69	0	1.59	13.3	66	3	58.4	0.49	12.5	5	3	60.0	3
*ID0341		58.6	39.5	78	1	1.63	14.2	68	4	52.6	0.57	13.6	5	2	59.6	2

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=IDAHO STATION=ABERDEEN NURSERY=UNIFORM

TABLE 51 (CONT)

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
BUTTE	S	53.8	2.50	2	85	85	160	1	2.7					MI				MJ	MJ	MI	MJ			
CHRIS		58.5	2.50	5	80	90	183	1	2.3	MI	MI		MI	MI				MJ	MJ	MI	MI			
ERA	S	55.2	2.75	2	85	85	170	1	1.7		MI		MJ			MJ		MJ	MJ	MI	MJ			
MARQUIS		61.1	2.50	5	90	85	181	2	3.0					MI					MI	MI	MI			
STOA	S	60.2	3.25	5	80	90	183	2	2.7				MI	MI				MI	MJ		MI			
SD3055		61.1	2.25	7	80	85	200	2	3.3									MI	MI	MI				
SD3056		59.0	2.75	5	80	90	184	1	2.3					MJ	MI			MI	MJ	MI	MI			
SD3080		63.4	3.25	9	85	85	193	4	3.7					MI				MI						
SD8072		61.0	2.25	5	80	75	188	1	3.0									MJ	MI	MI	MI		MI	
SD8073		55.5	3.00	2	80	85	176	1	2.0					MJ	MI	MI		MI	MJ		MJ			
SD8074		60.0	3.50	2	80	75	179	1	2.3					MJ					MJ		MJ		MI	
MN87150		52.2	3.50	0	75	50	141	1	1.7				MI	MJ		MJ		MJ	MJ		MJ	MI	MJ	MI
MN88170		56.2	1.75	2	80	75	165	1	1.3	MJ			MJ			MJ		MJ	MJ	MJ	MJ		MI	
MN88189		57.6	3.50	7	80	85	198	2	2.3				MI			MJ		MI	MJ					
MN88320		59.6	2.25	2	85	85	180	1	2.0				MI			MJ		MJ	MJ	MI	MJ			
MN88334		56.2	2.50	2	80	85	177	1	2.7		MI		MI					MJ	MJ	MI	MJ			
ND655		60.2	3.25	5	80	85	185	1	2.3					MJ				MJ	MJ		MI			
ND657		59.6	3.25	9	85	90	196	2	3.0					MI				MI	MJ					
ND662		60.5	4.75	9	85	85	195	2	3.0					MI				MJ	MI					
ND671		64.0	2.50	7	90	85	192	3	3.0					MJ						MI				
ND672		59.3	3.25	5	85	90	176	2	2.0				MI	MJ		MI		MI	MJ		MI			
XW398A4		58.6	4.25	7	75	85	190	1	2.3					MI	MJ			MJ	MJ			MI		
N86-542		54.6	4.25	2	80	80	168	1	1.7				MJ			MJ		MJ	MJ		MJ		MI	
N87-0306		57.9	3.50	7	80	85	195	1	1.7				MJ			MJ		MJ	MJ					
N88-3136		57.3	2.75	5	75	90	195	1	2.7	MI				MI				MJ	MJ	MI	MI	MI		
N88-3034		57.6	2.75	5	80	85	196	1	2.7	MJ	MI							MJ	MJ	MI	MI			
N87-467		59.0	3.00	7	75	85	204	2	2.3				MI			MJ		MI	MJ			MI		
FA987-350		60.3	3.75	7	90	85	193	2	2.7					MJ					MJ					
CI982-309		58.2	3.50	5	85	90	188	1	2.3					MJ				MJ	MJ		MI			
AC-MINTO		57.6	1.50	2	85	75	175	1	3.0	MI								MJ	MJ	MJ	MJ		MI	
BW148		60.8	2.25	5	80	85	180	2	3.0					MI	MI			MI	MI	MI	MI			
ID0367		58.2	4.25	5	90	80	192	2	2.0				MJ			MJ			MJ		MI		MI	
* COPPER		57.6	4.75	2	90	75	178	1	1.7				MJ			MJ			MJ		MJ		MI	
* PONDERA		60.0	3.00	5	90	85	200	2	2.7				MI			MI			MJ		MI			
* ID0341		59.6	4.25	7	85	85	203	2	2.7					MJ	MI			MI	MJ					

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	37.9	8	13.9	56.0	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	75	80	150
MAJOR FAULTING VALUES	56.9	34.9	18	12.9	54.0	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	50	50	140

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

* CULTIVARS WERE NOT INCLUDED IN REGIONAL STATISTICAL DATA.

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=WASHINGTON STATION=PULLMAN NURSERY=UNIFORM

TABLE 52

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
BUTTE 86	S	63.4	32.5	47	0	1.39	12.6	58	2	65.4	0.42	11.8	5	2	56.2	2
CHRIS		62.8	26.7	18	1	1.43	13.4	60	3	60.3	0.48	13.4	5	3	54.6	2
ERA	S	63.7	26.7	17	3	1.42	11.6	62	2	62.9	0.46	10.5	5	2	51.9	1
MARQUIS		63.5	29.0	30	0	1.43	13.3	56	3	62.1	0.43	12.9	5	3	54.3	2
STOA	S	63.1	28.3	13	0	1.46	13.1	58	3	63.6	0.41	12.8	5	3	55.0	2
SD 3055		65.0	35.6	56	0	1.44	12.7	46	2	63.8	0.39	12.4	5	2	55.0	2
SD 3056		63.8	34.8	52	0	1.50	13.1	60	3	61.6	0.50	12.3	5	1	56.5	2
SD 3080		66.6	33.0	50	0	1.39	13.8	62	3	60.6	0.41	13.8	5	3	57.6	2
SD 8072		64.9	31.6	53	0	1.42	13.0	66	3	65.1	0.43	12.6	5	3	57.6	2
SD 8073		63.7	30.7	33	0	1.47	13.0	66	3	59.9	0.49	12.5	5	2	58.2	2
SD 8074		63.5	29.0	31	0	1.47	14.1	69	4	61.2	0.48	13.4	5	3	57.3	3
MN 87150		63.1	30.5	22	1	1.44	12.4	45	2	61.7	0.44	12.3	5	1	54.3	1
MN 88170		61.4	29.2	21	0	1.48	12.3	56	2	62.6	0.40	11.8	5	2	53.8	1
MN 88189		64.5	35.8	58	0	1.43	12.3	57	2	65.6	0.34	11.7	5	2	53.8	2
MN 88320		65.4	33.4	53	0	1.46	11.9	67	2	61.5	0.47	10.6	5	1	54.3	1
MN 88334		63.0	26.4	15	2	1.41	11.7	58	2	62.6	0.44	10.7	5	2	52.9	1
ND 655		64.3	32.9	46	0	1.46	11.6	58	2	59.7	0.45	10.4	5	1	52.9	1
ND 657		64.7	31.0	27	0	1.52	12.4	66	2	56.7	0.53	11.8	5	1	55.0	2
ND 662		63.6	30.7	25	0	1.48	11.8	64	2	64.1	0.39	10.5	5	2	53.8	2
ND 671		66.0	30.8	34	0	1.46	12.5	55	2	59.9	0.38	12.4	5	1	57.3	2
ND 672		63.3	28.0	27	1	1.53	11.9	68	2	56.5	0.49	10.2	5	1	51.9	1
XW 398A4		64.7	34.7	46	0	1.52	11.5	55	2	61.6	0.47	10.4	5	1	52.2	1
N86-0542		63.6	30.2	31	1	1.46	11.0	51	2	63.2	0.39	10.4	5	2	51.6	0
N87-0306		64.2	32.1	37	0	1.45	11.6	54	2	59.2	0.42	10.4	5	1	51.0	0
N88-3136		65.1	29.5	33	0	1.47	12.4	56	2	62.4	0.40	12.2	5	2	54.3	1
N88-3034		62.3	27.5	17	0	1.57	13.7	59	3	58.5	0.47	13.4	5	2	55.0	1
N87-0467		62.6	31.7	22	2	1.57	11.9	48	2	57.1	0.46	11.1	5	1	52.9	2
FA 987350		61.8	36.5	58	0	1.52	12.3	53	2	57.5	0.45	11.4	5	1	52.9	1
CI 982309		61.5	32.1	46	0	1.57	13.9	63	3	57.5	0.48	13.8	5	2	58.2	3
AC-MINTO		63.8	31.1	40	0	1.51	13.9	79	3	58.0	0.48	13.7	5	2	55.8	3
BW 148		64.5	30.9	46	0	1.49	14.3	72	4	62.7	0.45	14.7	5	4	57.9	3
ID 367		63.2	29.7	24	1	1.42	11.9	50	2	59.3	0.40	11.4	5	1	55.5	2
*WPB 0906		62.7	38.8	65	0	1.43	12.3	48	2	56.9	0.42	11.5	5	1	54.6	2

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=WASHINGTON STATION=PULLMAN NURSERY=UNIFORM

TABLE 52 (CONT)

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
BUTTE 86	S	.	.	.	.	.	.	4	2.7				MJ			MJ		MI						
CHRIS		.	.	.	.	.	.	4	3.3		MI		MI	MI				MI						
ERA	S	.	.	.	.	.	.	3	2.3		MI		MJ			MJ		MJ						
MARQUIS		.	.	.	.	.	.	4	3.3				MI			MI		MI						
STOA	S	.	.	.	.	.	.	4	3.3				MI			MI		MI						
SD 3055		.	.	.	.	.	.	4	2.7				MJ			MJ		MI						
SD 3056		.	.	.	.	.	.	4	2.7				MI	MI		MJ		MI						
SD 3080		.	.	.	.	.	.	4	3.3				MI	MI				MI						
SD 8072		.	.	.	.	.	.	4	3.3				MI			MI		MI						
SD 8073		.	.	.	.	.	.	4	3.0				MI	MI		MI		MI						
SD 8074		.	.	.	.	.	.	4	3.7					MI										
MN 87150		.	.	.	.	.	.	3	2.0				MJ	MI		MJ		MJ						
MN 88170		.	.	.	.	.	.	3	2.3				MJ			MJ		MJ						
MN 88189		.	.	.	.	.	.	4	2.7				MJ			MJ		MI						
MN 88320		.	.	.	.	.	.	3	2.0				MJ	MI		MJ		MJ						
MN 88334		.	.	.	.	.	.	3	2.3		MI		MJ			MJ		MJ						
ND 655		.	.	.	.	.	.	3	2.0				MJ	MJ		MJ		MJ						
ND 657		.	.	.	.	.	.	4	2.3				MJ	MJ		MJ		MI						
ND 662		.	.	.	.	.	.	4	2.7				MJ			MJ		MI						
ND 671		.	.	.	.	.	.	4	2.3				MJ	MI		MJ		MI						
ND 672		.	.	.	.	.	.	3	2.0				MJ	MJ		MJ		MJ						
XW 398A4		.	.	.	.	.	.	3	2.0				MJ	MI		MJ		MJ						
N86-0542		.	.	.	.	.	.	4	2.7				MJ			MJ								
N87-0306		.	.	.	.	.	.	4	2.3				MJ	MJ		MJ								
N88-3136		.	.	.	.	.	.	3	2.3				MJ			MJ		MJ						
N88-3034		.	.	.	.	.	.	3	2.7				MI	MJ				MJ						
N87-0467		.	.	.	.	.	.	4	2.3				MJ	MJ		MJ		MI						
FA 987350		.	.	.	.	.	.	3	2.0				MJ	MJ		MJ		MJ						
CI 982309		.	.	.	.	.	.	4	3.0				MI	MJ										
AC-MINTO		.	.	.	.	.	.	4	3.0				MI	MJ										
BW 148		.	.	.	.	.	.	4	4.0															
ID 367		.	.	.	.	.	.	4	2.3				MJ	MJ		MJ		MI						
*WPB 0906		.	.	.	.	.	.	4	2.3				MJ	MJ		MJ		MI						

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	27.1	8	13.9	61.9	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	75	80	.
MAJOR FAULTING VALUES	56.9	24.1	18	12.9	59.9	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	50	50	.

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

* CULTIVARS WERE NOT INCLUDED IN REGIONAL STATISTICAL DATA.

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

WESTERN REGION

TABLE 53

VARIETY=AC-MINTO

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	57.9666667	1.3428825	57.0000000	59.5000000	1.8033333	2.3166460
K_WT	31.3333333	9.2424744	25.7000000	42.0000000	85.4233333	29.4972588
LG	38.6666667	43.6157464	12.0000000	89.0000000	1902.33	112.7993441
SM	3.0000000	2.0000000	1.0000000	5.0000000	4.0000000	66.6666667
WHT_ASH	1.6433333	0.0981495	1.5300000	1.7000000	0.0096333	5.9725890
WHT_PRO	16.3333333	1.8009257	14.5000000	18.1000000	3.2433333	11.0260756
HARD	79.6666667	8.3266640	73.0000000	89.0000000	69.3333333	10.4518795
EXTR	61.4333333	2.7754879	58.9000000	64.4000000	7.7033333	4.5178860
FL_ASH	0.5133333	0.0321455	0.4900000	0.5500000	0.0010333	6.2621109
FL_PRO	16.1666667	2.0008332	14.2000000	18.2000000	4.0033333	12.3762876
MIXO	2.3333333	1.1547005	1.0000000	3.0000000	1.3333333	49.4871659
BAKE_ABS	59.2000000	1.3856406	57.6000000	60.0000000	1.9200000	2.3406092
LOAF_VOL	189.3333333	15.0443788	175.0000000	205.0000000	226.3333333	7.9459747

VARIETY=BUTTE 86

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.0333333	1.9295941	58.5000000	62.2000000	3.7233333	3.2142045
K_WT	33.9000000	8.5580372	27.9000000	43.7000000	73.2400000	25.2449474
LG	42.3333333	41.7891533	12.0000000	90.0000000	1746.33	98.7145353
SM	2.0000000	2.6457513	0	5.0000000	7.0000000	132.2875656
WHT_ASH	1.5266667	0.2055075	1.2900000	1.6600000	0.0422333	13.4611901
WHT_PRO	15.6333333	1.2423097	14.2000000	16.4000000	1.5433333	7.9465438
HARD	72.6666667	7.3711148	67.0000000	81.0000000	54.3333333	10.1437360
EXTR	58.8000000	2.7874720	55.7000000	61.1000000	7.7700000	4.7405986
FL_ASH	0.4733333	0.0351188	0.4400000	0.5100000	0.0012333	7.4194745
FL_PRO	14.8000000	1.0816654	13.6000000	15.7000000	1.1700000	7.3085499
MIXO	1.6666667	0.5773503	1.0000000	2.0000000	0.3333333	34.6410162
BAKE_ABS	57.5666667	3.2654760	53.8000000	59.6000000	10.6633333	5.6725118
LOAF_VOL	181.6666667	19.2959409	160.0000000	197.0000000	372.3333333	10.6216188

VARIETY=BW148

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.1333333	2.2278540	58.7000000	62.7000000	4.9633333	3.7048569
K_WT	31.7333333	5.4720502	27.9000000	38.0000000	29.9433333	17.2438557
LG	43.6666667	36.1432336	18.0000000	85.0000000	1306.33	82.7707639
SM	1.0000000	1.7320508	0	3.0000000	3.0000000	173.2050808
WHT_ASH	1.6200000	0.1928730	1.4000000	1.7600000	0.0372000	11.9057417
WHT_PRO	16.5000000	0.2645751	16.2000000	16.7000000	0.0700000	1.6034856
HARD	77.6666667	7.0237692	71.0000000	85.0000000	49.3333333	9.0434796
EXTR	59.4000000	4.5574115	54.2000000	62.7000000	20.7700000	7.6724100
FL_ASH	0.5333333	0.0635085	0.4600000	0.5700000	0.0040333	11.9078493
FL_PRO	16.3000000	0.2000000	16.1000000	16.5000000	0.0400000	1.2269939
MIXO	2.6666667	0.5773503	2.0000000	3.0000000	0.3333333	21.6506351
BAKE_ABS	60.1333333	0.6110101	59.6000000	60.8000000	0.3733333	1.0160922
LOAF_VOL	183.6666667	4.7258156	180.0000000	189.0000000	22.3333333	2.5730394

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

WESTERN REGION

TABLE 54

VARIETY=CHRIS

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	57.3666667	0.8504901	56.5000000	58.2000000	0.7233333	1.4825509
K_WT	26.0333333	8.2923660	20.9000000	35.6000000	68.7633333	31.8528782
LG	26.3333333	37.8461799	3.0000000	70.0000000	1432.33	143.7196705
SM	10.0000000	7.8102497	1.0000000	15.0000000	61.0000000	78.1024968
WHT ASH	1.6333333	0.1205543	1.5200000	1.7600000	0.0145333	7.3808740
WHT PRO	15.6666667	2.0033306	13.4000000	17.2000000	4.0133333	12.7872163
HARD	72.3333333	0.5773503	72.0000000	73.0000000	0.3333333	0.7981801
EXTR	58.1333333	4.1549168	54.1000000	62.4000000	17.2633333	7.1472192
FL ASH	0.5066667	0.0251661	0.4800000	0.5300000	0.000633333	4.9669963
FL_PRO	15.6666667	2.4440404	13.0000000	17.8000000	5.9733333	15.6002577
MIXO	2.3333333	1.1547005	1.0000000	3.0000000	1.3333333	49.4871659
BAKE ABS	59.4000000	1.4730920	58.5000000	61.1000000	2.1700000	2.4799528
LOAF VOL	193.0000000	17.3205081	183.0000000	213.0000000	300.0000000	8.9743565

VARIETY=CI982309

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	56.6000000	3.8574603	52.2000000	59.4000000	14.8800000	6.8153009
K_WT	30.7666667	10.4318423	22.9000000	42.6000000	108.8233333	33.9063129
LG	38.6666667	44.7362642	8.0000000	90.0000000	2001.33	115.6972350
SM	5.0000000	5.2915026	1.0000000	11.0000000	28.0000000	105.8300524
WHT_ASH	1.6233333	0.2318045	1.4100000	1.8700000	0.0537333	14.2795389
WHT_PRO	15.9666667	1.6258331	14.2000000	17.4000000	2.6433333	10.1826709
HARD	72.3333333	5.1316014	68.0000000	78.0000000	26.3333333	7.0943799
EXTR	54.2000000	3.2078030	50.5000000	56.2000000	10.2900000	5.9184557
FL_ASH	0.5266667	0.0550757	0.4900000	0.5900000	0.0030333	10.4574124
FL_PRO	15.6666667	1.6258331	13.9000000	17.1000000	2.6433333	10.3776582
MIXO	3.3333333	2.0816660	1.0000000	5.0000000	4.3333333	62.4499800
BAKE ABS	59.9333333	2.1221059	58.2000000	62.3000000	4.5033333	3.5407773
LOAF VOL	201.3333333	17.3877351	188.0000000	221.0000000	302.3333333	8.6362923

VARIETY=ERA

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	57.0000000	3.1240999	53.4000000	59.0000000	9.7600000	5.4808770
K_WT	26.7333333	9.5001754	20.0000000	37.6000000	90.2533333	35.5368158
LG	29.6666667	41.1015004	3.0000000	77.0000000	1689.33	138.5443833
SM	11.3333333	10.5987421	0	21.0000000	112.3333333	93.5183123
WHT_ASH	1.6066667	0.1890326	1.4600000	1.8200000	0.0357333	11.7655161
WHT_PRO	14.1000000	1.9924859	11.8000000	15.3000000	3.9700000	14.1311056
HARD	66.0000000	5.5677644	60.0000000	71.0000000	31.0000000	8.4360066
EXTR	60.9000000	3.6592349	57.1000000	64.4000000	13.3900000	6.0085959
FL ASH	0.5166667	0.0404145	0.4700000	0.5400000	0.0016333	7.8221649
FL_PRO	13.2000000	2.1794495	10.7000000	14.7000000	4.7500000	16.5109808
MIXO	2.3333333	1.1547005	1.0000000	3.0000000	1.3333333	49.4871659
BAKE ABS	56.8000000	1.3856406	55.2000000	57.6000000	1.9200000	2.4395082
LOAF VOL	196.3333333	25.5408170	170.0000000	221.0000000	652.3333333	13.0089051

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

WESTERN REGION

TABLE 55

VARIETY=FA987350

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.0000000	1.6000000	57.4000000	60.6000000	2.5600000	2.7118644
K_WT	39.7333333	13.1561139	31.4000000	54.9000000	173.0833333	33.1110250
LG	55.0000000	35.7910603	30.0000000	96.0000000	1281.00	65.0746552
SM	1.0000000	1.0000000	0	2.0000000	1.0000000	100.0000000
WHT_ASH	1.5833333	0.1934770	1.3600000	1.7000000	0.0374333	12.2195974
WHT_PRO	15.5000000	0.2000000	15.3000000	15.7000000	0.0400000	1.2903226
HARD	55.6666667	13.4288247	46.0000000	71.0000000	180.3333333	24.1236372
EXTR	57.7666667	3.8850139	53.5000000	61.1000000	15.0933333	6.7253559
FL_ASH	0.4733333	0.0152753	0.4600000	0.4900000	0.000233333	3.2271660
FL_PRO	14.9333333	0.2309401	14.8000000	15.2000000	0.0533333	1.5464739
MIXO	2.6666667	0.5773503	2.0000000	3.0000000	0.3333333	21.6506351
BAKE_ABS	58.6000000	1.4798649	57.6000000	60.3000000	2.1900000	2.5253667
LOAF_VOL	205.6666667	14.8436294	193.0000000	222.0000000	220.3333333	7.2173239

VARIETY=ID367

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	57.2666667	4.8190594	51.8000000	60.9000000	23.2233333	8.4151212
K_WT	30.5333333	10.5396078	21.7000000	42.2000000	111.0833333	34.5183663
LG	34.3333333	43.5009578	3.0000000	84.0000000	1892.33	126.7018190
SM	8.0000000	9.6436508	1.0000000	19.0000000	93.0000000	120.5456345
WHT_ASH	1.5600000	0.2700000	1.2900000	1.8300000	0.0729000	17.3076923
WHT_PRO	14.2666667	1.5275252	12.6000000	15.6000000	2.3333333	10.7069526
HARD	61.3333333	10.5039675	51.0000000	72.0000000	110.3333333	17.1260340
EXTR	62.7000000	1.7000000	61.0000000	64.4000000	2.8900000	2.7113238
FL_ASH	0.4433333	0.0416333	0.4100000	0.4900000	0.0017333	9.3909744
FL_PRO	13.6666667	1.7502381	11.9000000	15.4000000	3.0633333	12.8066201
MIXO	4.3333333	2.3094011	3.0000000	7.0000000	5.3333333	53.2938710
BAKE_ABS	58.4666667	1.0263203	57.6000000	59.6000000	1.0533333	1.7553939
LOAF_VOL	201.6666667	9.0737717	192.0000000	210.0000000	82.3333333	4.4993909

VARIETY=MAROUIS

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	58.9333333	2.6764404	56.5000000	61.8000000	7.1633333	4.5414713
K_WT	30.5000000	10.0642933	23.3000000	42.0000000	101.2900000	32.9976830
LG	38.6666667	45.7857329	6.0000000	91.0000000	2096.33	118.4113781
SM	3.0000000	4.3588989	0	8.0000000	19.0000000	145.2966315
WHT_ASH	1.6166667	0.1887679	1.4100000	1.7800000	0.0356333	11.6763671
WHT_PRO	15.9666667	0.4932883	15.4000000	16.3000000	0.2433333	3.0894882
HARD	70.6666667	6.1101009	64.0000000	76.0000000	37.3333333	8.6463692
EXTR	57.7000000	1.7691806	55.8000000	59.3000000	3.1300000	3.0661709
FL_ASH	0.5200000	0.0360555	0.4800000	0.5500000	0.0013000	6.9337525
FL_PRO	15.3666667	0.5859465	14.7000000	15.8000000	0.3433333	3.8131010
MIXO	3.0000000	0	3.0000000	3.0000000	0	0
BAKE_ABS	59.5333333	1.4640128	58.2000000	61.1000000	2.1433333	2.4591480
LOAF_VOL	190.6666667	14.2243922	181.0000000	207.0000000	202.3333333	7.4603456

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

WESTERN REGION

TABLE 56

VARIETY=MN87150

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	58.9666667	2.5383722	56.9000000	61.8000000	6.4433333	4.3047578
K_WT	32.4666667	8.4719144	25.8000000	42.0000000	71.7733333	26.0941921
LG	39.6666667	43.4664622	7.0000000	89.0000000	1889.33	109.5793164
SM	2.3333333	3.2145503	0	6.0000000	10.3333333	137.7664394
WHT_ASH	1.5000000	0.1833030	1.3000000	1.6600000	0.0336000	12.2202019
WHT_PRO	14.1666667	0.9712535	13.1000000	15.0000000	0.9433333	6.8559070
HARD	63.6666667	9.0737717	57.0000000	74.0000000	82.3333333	14.2519975
EXTR	57.5000000	10.2781321	45.7000000	64.5000000	105.6400000	17.8750124
FL_ASH	0.4700000	0.0529150	0.4300000	0.5300000	0.0028000	11.2585162
FL_PRO	13.2666667	1.4977761	11.6000000	14.5000000	2.2433333	11.2897698
MIXO	1.3333333	0.5773503	1.0000000	2.0000000	0.3333333	43.3012702
BAKE_ABS	55.4333333	2.8536526	52.2000000	57.6000000	8.1433333	5.1479001
LOAF_VOL	178.6666667	36.1155553	141.0000000	213.0000000	1304.33	20.2139302

VARIETY=MN88170

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	55.1333333	4.3878620	50.2000000	58.6000000	19.2533333	7.9586373
K_WT	30.3000000	12.2462239	21.1000000	44.2000000	149.9700000	40.4165806
LG	35.0000000	48.0728614	1.0000000	90.0000000	2311.00	137.3510325
SM	7.0000000	8.8881944	0	17.0000000	79.0000000	126.9742060
WHT_ASH	1.6400000	0.2505993	1.3800000	1.8800000	0.0628000	15.2804440
WHT_PRO	14.7000000	1.5874508	12.9000000	15.9000000	2.5200000	10.7989849
HARD	57.6666667	2.5166115	55.0000000	60.0000000	6.3333333	4.3640661
EXTR	62.2333333	2.2143472	59.7000000	63.8000000	4.9033333	3.5581368
FL_ASH	0.5266667	0.0450925	0.4800000	0.5700000	0.0020333	8.5618666
FL_PRO	13.8333333	1.9857828	11.6000000	15.4000000	3.9433333	14.3550564
MIXO	1.6666667	0.5773503	1.0000000	2.0000000	0.3333333	34.6410162
BAKE_ABS	58.6666667	2.2188586	56.2000000	60.5000000	4.9233333	3.7821453
LOAF_VOL	180.3333333	14.5716620	165.0000000	194.0000000	212.3333333	8.0804041

VARIETY=MN88189

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.0000000	2.4020824	57.1000000	61.7000000	5.7700000	4.0713262
K_WT	36.3000000	10.8282039	29.8000000	48.8000000	117.2500000	29.8297628
LG	50.0000000	38.1182371	27.0000000	94.0000000	1453.00	76.2364742
SM	1.6666667	0.5773503	1.0000000	2.0000000	0.3333333	34.6410162
WHT_ASH	1.5366667	0.0901850	1.4500000	1.6300000	0.0081333	5.8688717
WHT_PRO	14.9000000	1.3076697	13.4000000	15.8000000	1.7100000	8.7763066
HARD	66.0000000	2.6457513	63.0000000	68.0000000	7.0000000	4.0087141
EXTR	61.0666667	4.7606022	56.5000000	66.0000000	22.6633333	7.7957460
FL_ASH	0.4600000	0.0400000	0.4200000	0.5000000	0.0016000	8.6956522
FL_PRO	14.1666667	1.6165808	12.3000000	15.1000000	2.6133333	11.4111583
MIXO	2.3333333	0.5773503	2.0000000	3.0000000	0.3333333	24.7435830
BAKE_ABS	58.9333333	1.1547005	57.6000000	59.6000000	1.3333333	1.9593335
LOAF_VOL	203.6666667	10.6926766	197.0000000	216.0000000	114.3333333	5.2500867

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

WESTERN REGION

TABLE 57

VARIETY=MN88320

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.4666667	2.3245071	58.7000000	63.1000000	5.4033333	3.8442786
K_WT	32.7666667	10.3365049	25.5000000	44.6000000	106.8433333	31.5457932
LG	43.3333333	44.7921124	9.0000000	94.0000000	2006.33	103.3664132
SM	3.3333333	3.5118846	0	7.0000000	12.3333333	105.3565375
WHT_ASH	1.5266667	0.1401190	1.3700000	1.6400000	0.0196333	9.1781002
WHT_PRO	13.9666667	0.6658328	13.2000000	14.4000000	0.4433333	4.7672994
HARD	76.0000000	8.8881944	69.0000000	86.0000000	79.0000000	11.6949927
EXTR	60.8000000	2.3811762	59.0000000	63.5000000	5.6700000	3.9164082
FL_ASH	0.4833333	0.0208167	0.4600000	0.5000000	0.000433333	4.3068952
FL_PRO	13.0000000	0.5567764	12.4000000	13.5000000	0.3100000	4.2828957
MIXO	2.0000000	1.0000000	1.0000000	3.0000000	1.0000000	50.0000000
BAKE_ABS	59.4000000	0.7211103	58.6000000	60.0000000	0.5200000	1.2139903
LOAF_VOL	193.3333333	11.7189306	180.0000000	202.0000000	137.3333333	6.0615158

VARIETY=MN88334

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	58.3666667	2.7465129	55.3000000	60.6000000	7.5433333	4.7056190
K_WT	26.7666667	9.3724774	20.2000000	37.5000000	87.8433333	35.0154823
LG	29.6666667	43.6615773	2.0000000	80.0000000	1906.33	147.1738561
SM	13.3333333	11.5902258	1.0000000	24.0000000	134.3333333	86.9266933
WHT_ASH	1.5433333	0.1755942	1.3600000	1.7100000	0.0308333	11.3775958
WHT_PRO	14.9000000	0.8717798	13.9000000	15.5000000	0.7600000	5.8508711
HARD	64.0000000	3.6055513	60.0000000	67.0000000	13.0000000	5.6336739
EXTR	63.0666667	0.9291573	62.0000000	63.7000000	0.8633333	1.4732939
FL_ASH	0.4466667	0.0321455	0.4100000	0.4700000	0.0010333	7.1967543
FL_PRO	14.1666667	1.0214369	13.0000000	14.9000000	1.0433333	7.2101428
MIXO	2.0000000	1.0000000	1.0000000	3.0000000	1.0000000	50.0000000
BAKE_ABS	58.3666667	1.8823744	56.2000000	59.6000000	3.5433333	3.2250846
LOAF_VOL	189.3333333	13.0511813	177.0000000	203.0000000	170.3333333	6.8932296

VARIETY=ND655

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.9666667	0.6506407	59.3000000	60.6000000	0.4233333	1.0850040
K_WT	29.6333333	10.2627157	22.0000000	41.3000000	105.3233333	34.6323364
LG	35.3333333	45.6544996	7.0000000	88.0000000	2084.33	129.2108479
SM	6.6666667	6.0277138	1.0000000	13.0000000	36.3333333	90.4157066
WHT_ASH	1.6633333	0.0763763	1.5800000	1.7300000	0.0058333	4.5917592
WHT_PRO	16.2333333	1.0503968	15.2000000	17.3000000	1.1033333	6.4706165
HARD	74.3333333	8.0829038	67.0000000	83.0000000	65.3333333	10.8738616
EXTR	57.7333333	8.6858122	47.8000000	63.9000000	75.4433333	15.0447093
FL_ASH	0.5133333	0.0152753	0.5000000	0.5300000	0.000233333	2.9756985
FL_PRO	15.8666667	1.3650397	14.4000000	17.1000000	1.8633333	8.6031913
MIXO	2.0000000	1.0000000	1.0000000	3.0000000	1.0000000	50.0000000
BAKE_ABS	60.6333333	0.6658328	60.2000000	61.4000000	0.4433333	1.0981300
LOAF_VOL	196.0000000	11.5325626	185.0000000	208.0000000	133.0000000	5.8839605

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

WESTERN REGION

TABLE 58

VARIETY=ND657

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.3666667	3.7098967	56.1000000	63.4000000	13.7633333	6.2491241
K_WT	31.5333333	7.1065697	25.0000000	39.1000000	50.5033333	22.5366905
LG	38.0000000	39.3954312	6.0000000	82.0000000	1552.00	103.6721874
SM	3.3333333	4.0414519	1.0000000	8.0000000	16.3333333	121.2435565
WHT_ASH	1.6266667	0.1703917	1.4300000	1.7300000	0.0290333	10.4748999
WHT_PRO	15.8000000	0.9165151	14.8000000	16.6000000	0.8400000	5.8007287
HARD	71.6666667	4.5092498	67.0000000	76.0000000	20.3333333	6.2919764
EXTR	59.9000000	5.0467812	54.2000000	63.8000000	25.4700000	8.4253442
FL_ASH	0.5033333	0.0115470	0.4900000	0.5100000	0.000133333	2.2941070
FL_PRO	15.3666667	1.3316656	13.9000000	16.5000000	1.7733333	8.6659368
MIXO	3.0000000	1.0000000	2.0000000	4.0000000	1.0000000	33.3333333
BAKE_ABS	62.0000000	2.1377558	59.6000000	63.7000000	4.5700000	3.4479933
LOAF_VOL	213.0000000	17.5214155	196.0000000	231.0000000	307.0000000	8.2260167

VARIETY=ND662

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	58.4000000	1.6703293	56.6000000	59.9000000	2.7900000	2.8601529
K_WT	30.4000000	10.2586549	23.6000000	42.2000000	105.2400000	33.7455753
LG	34.0000000	45.9020697	7.0000000	87.0000000	2107.00	135.0060873
SM	8.0000000	7.5498344	0	15.0000000	57.0000000	94.3729304
WHT_ASH	1.6133333	0.1361372	1.4600000	1.7200000	0.0185333	8.4382553
WHT_PRO	15.8666667	0.6027714	15.3000000	16.5000000	0.3633333	3.7989793
HARD	70.0000000	6.0000000	64.0000000	76.0000000	36.0000000	8.5714286
EXTR	61.1000000	4.8041649	55.7000000	64.9000000	23.0800000	7.8627903
FL_ASH	0.5100000	0.0100000	0.5000000	0.5200000	0.000100000	1.9607843
FL_PRO	15.5333333	0.6110101	15.0000000	16.2000000	0.3733333	3.9335414
MIXO	4.3333333	3.0550505	1.0000000	7.0000000	9.3333333	70.5011645
BAKE_ABS	60.3000000	1.6093477	58.6000000	61.8000000	2.5900000	2.6689016
LOAF_VOL	196.0000000	1.7320508	195.0000000	198.0000000	3.0000000	0.8836994

VARIETY=ND671

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	61.2000000	2.5357445	59.4000000	64.1000000	6.4300000	4.1433733
K_WT	30.4333333	7.8014956	25.2000000	39.4000000	60.8633333	25.6347062
LG	36.6666667	42.7356214	11.0000000	86.0000000	1826.33	116.5516946
SM	2.3333333	1.1547005	1.0000000	3.0000000	1.3333333	49.4871659
WHT_ASH	1.5633333	0.1625833	1.3800000	1.6900000	0.0264333	10.3997854
WHT_PRO	16.5333333	0.4041452	16.1000000	16.9000000	0.1633333	2.4444265
HARD	70.6666667	10.2632029	62.0000000	82.0000000	105.3333333	14.5234003
EXTR	58.2333333	5.1403632	52.4000000	62.1000000	26.4233333	8.8271834
FL_ASH	0.4366667	0.0208167	0.4200000	0.4600000	0.000433333	4.7671740
FL_PRO	16.6333333	0.3785939	16.2000000	16.9000000	0.1433333	2.2761156
MIXO	4.0000000	1.0000000	3.0000000	5.0000000	1.0000000	25.0000000
BAKE_ABS	62.5333333	1.8175075	60.5000000	64.0000000	3.3033333	2.9064618
LOAF_VOL	200.3333333	13.5769412	192.0000000	216.0000000	184.3333333	6.7771753

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

WESTERN REGION

TABLE 59

VARIETY=ND672

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	58.4666667	2.9687259	55.2000000	61.0000000	8.8133333	5.0776383
K_WT	28.7000000	11.8646534	21.8000000	42.4000000	140.7700000	41.3402557
LG	35.6666667	47.9617903	6.0000000	91.0000000	2300.33	134.4723094
SM	10.6666667	8.5049005	1.0000000	17.0000000	72.3333333	79.7334426
WHT_ASH	1.6433333	0.1550269	1.5300000	1.8200000	0.0240333	9.4336843
WHT_PRO	15.5000000	1.5132746	13.8000000	16.7000000	2.2900000	9.7630619
HARD	80.3333333	5.5075705	75.0000000	86.0000000	30.3333333	6.8558969
EXTR	55.9666667	5.2367293	52.6000000	62.0000000	27.4233333	9.3568718
FL_ASH	0.5566667	0.0702377	0.4900000	0.6300000	0.0049333	12.6175494
FL_PRO	14.8333333	1.6862186	12.9000000	16.0000000	2.8433333	11.3677662
MIXO	4.6666667	2.5166115	2.0000000	7.0000000	6.3333333	53.9273888
BAKE_ABS	61.5000000	1.9078784	59.3000000	62.7000000	3.6400000	3.1022413
LOAF_VOL	204.0000000	27.0554985	176.0000000	230.0000000	732.0000000	13.2624993

VARIETY=N86-0542

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	57.9666667	3.8552994	53.6000000	60.9000000	14.8633333	6.6508903
K_WT	29.7000000	9.3439820	22.3000000	40.2000000	87.3100000	31.4612189
LG	34.3333333	42.4421174	5.0000000	83.0000000	1801.33	123.6178178
SM	7.0000000	6.0000000	1.0000000	13.0000000	36.0000000	85.7142857
WHT_ASH	1.6433333	0.1955335	1.4800000	1.8600000	0.0382333	11.8985877
WHT_PRO	13.4666667	2.1385353	11.0000000	14.8000000	4.5733333	15.8802128
HARD	59.0000000	5.1961524	53.0000000	62.0000000	27.0000000	8.8070380
EXTR	63.9333333	4.1198705	59.6000000	67.8000000	16.9733333	6.4440102
FL_ASH	0.4533333	0.0208167	0.4300000	0.4700000	0.000433333	4.5919103
FL_PRO	12.8333333	2.2300972	10.3000000	14.5000000	4.9733333	17.3773805
MIXO	2.6666667	2.0816660	1.0000000	5.0000000	4.3333333	78.0624750
BAKE_ABS	57.8333333	2.9263174	54.6000000	60.3000000	8.5633333	5.0599148
LOAF_VOL	190.0000000	19.0787840	168.0000000	202.0000000	364.0000000	10.0414653

VARIETY=N87-0306

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	57.9333333	2.9143324	54.6000000	60.0000000	8.4933333	5.0304932
K_WT	31.7666667	11.3005900	24.7000000	44.8000000	127.7033333	35.5737354
LG	38.6666667	43.9355589	8.0000000	89.0000000	1930.33	113.6264454
SM	5.3333333	4.0414519	1.0000000	9.0000000	16.3333333	75.7772228
WHT_ASH	1.5766667	0.1059874	1.4800000	1.6900000	0.0112333	6.7222466
WHT_PRO	14.7000000	1.9974984	12.4000000	16.0000000	3.9900000	13.5884247
HARD	64.0000000	5.5677644	58.0000000	69.0000000	31.0000000	8.6996318
EXTR	63.6333333	2.0305993	61.3000000	65.0000000	4.1233333	3.1910936
FL_ASH	0.4500000	0.0100000	0.4400000	0.4600000	0.000100000	2.2222222
FL_PRO	13.8666667	2.3180452	11.2000000	15.4000000	5.3733333	16.7166718
MIXO	3.3333333	2.0816660	1.0000000	5.0000000	4.3333333	62.4499800
BAKE_ABS	60.0000000	1.9672316	57.9000000	61.8000000	3.8700000	3.2787193
LOAF_VOL	201.0000000	14.9331845	190.0000000	218.0000000	223.0000000	7.4294450

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

WESTERN REGION

TABLE 60

VARIETY=N87-467

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	57.8333333	1.6072751	56.0000000	59.0000000	2.5833333	2.7791501
K_WT	33.0000000	12.4903963	25.1000000	47.4000000	156.0100000	37.8496858
LG	35.3333333	47.3532822	7.0000000	90.0000000	2242.33	134.0187232
SM	7.3333333	7.0237692	0	14.0000000	49.3333333	95.7786705
WHT_ASH	1.6633333	0.1357694	1.5800000	1.8200000	0.0184333	8.1624897
WHT_PRO	14.6333333	1.3203535	13.2000000	15.8000000	1.7433333	9.0229168
HARD	52.6666667	9.2915732	45.0000000	63.0000000	86.3333333	17.6422277
EXTR	63.0666667	3.5571524	59.0000000	65.6000000	12.6533333	5.6403051
FL_ASH	0.4866667	0.0378594	0.4600000	0.5300000	0.0014333	7.7793265
FL_PRO	13.9666667	1.4294521	12.4000000	15.2000000	2.0433333	10.2347406
MIXO	2.6666667	0.5773503	2.0000000	3.0000000	0.3333333	21.6506351
BAKE_ABS	59.1333333	1.6041613	57.6000000	60.8000000	2.5733333	2.7127868
LOAF_VOL	207.3333333	14.2945211	195.0000000	223.0000000	204.3333333	6.8944636

VARIETY=N88-3034

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	57.2333333	3.5161532	54.5000000	61.2000000	12.3633333	6.1435408
K_WT	28.6666667	7.2141066	22.5000000	36.6000000	52.0433333	25.1654880
LG	33.6666667	39.8789836	4.0000000	79.0000000	1590.33	118.4524265
SM	5.0000000	5.2915026	1.0000000	11.0000000	28.0000000	105.8300524
WHT_ASH	1.6833333	0.2112660	1.4600000	1.8800000	0.0446333	12.5504569
WHT_PRO	15.7000000	0.9848858	14.6000000	16.5000000	0.9700000	6.2731578
HARD	67.6666667	8.0829038	63.0000000	77.0000000	65.3333333	11.9451780
EXTR	62.2000000	4.4305756	57.1000000	65.1000000	19.6300000	7.1231119
FL_ASH	0.4866667	0.0416333	0.4400000	0.5200000	0.0017333	8.5547918
FL_PRO	15.7000000	1.0440307	14.5000000	16.4000000	1.0900000	6.6498768
MIXO	2.0000000	1.0000000	1.0000000	3.0000000	1.0000000	50.0000000
BAKE_ABS	58.3666667	1.0785793	57.6000000	59.6000000	1.1633333	1.8479371
LOAF_VOL	204.0000000	6.9282032	196.0000000	208.0000000	48.0000000	3.3961781

VARIETY=N88-3136

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.4666667	2.8867513	57.8000000	62.8000000	8.3333333	4.8544025
K_WT	28.8666667	8.9500466	22.5000000	39.1000000	80.1033333	31.0047802
LG	36.3333333	43.3628105	6.0000000	86.0000000	1880.33	119.3471848
SM	3.3333333	4.1633320	0	8.0000000	17.3333333	124.8999600
WHT_ASH	1.5866667	0.1877054	1.4200000	1.7900000	0.0352333	11.8301750
WHT_PRO	15.4333333	1.1718931	14.1000000	16.3000000	1.3733333	7.5932595
HARD	61.0000000	6.5574385	55.0000000	68.0000000	43.0000000	10.7498992
EXTR	60.7333333	6.0210741	54.0000000	65.6000000	36.2533333	9.9139530
FL_ASH	0.5066667	0.0404145	0.4700000	0.5500000	0.0016333	7.9765498
FL_PRO	15.1666667	1.4742230	13.5000000	16.3000000	2.1733333	9.7201514
MIXO	2.3333333	1.5275252	1.0000000	4.0000000	2.3333333	65.4653671
BAKE_ABS	59.0333333	1.6165808	57.3000000	60.5000000	2.6133333	2.7384202
LOAF_VOL	204.0000000	16.4620776	194.0000000	223.0000000	271.0000000	8.0696459

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

WESTERN REGION

TABLE 61

VARIETY=SD3055

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.2000000	1.7349352	59.1000000	62.2000000	3.0100000	2.8819521
K_WT	36.2000000	10.4790267	30.1000000	48.3000000	109.8100000	28.9475875
LG	47.0000000	41.5812458	22.0000000	95.0000000	1729.00	88.4707357
SM	1.3333333	1.1547005	0	2.0000000	1.3333333	86.6025404
WHT_ASH	1.5800000	0.1178983	1.4500000	1.6800000	0.0139000	7.4619153
WHT_PRO	15.5666667	0.2309401	15.3000000	15.7000000	0.0533333	1.4835553
HARD	63.3333333	9.4516313	56.0000000	74.0000000	89.3333333	14.9236283
EXTR	60.8333333	2.1594752	58.8000000	63.1000000	4.6633333	3.5498223
FL_ASH	0.4800000	0.0264575	0.4600000	0.5100000	0.000700000	5.5119819
FL_PRO	15.6000000	0.2645751	15.3000000	15.8000000	0.0700000	1.6959944
MIXO	2.6666667	0.5773503	2.0000000	3.0000000	0.3333333	21.6506351
BAKE_ABS	60.4000000	0.9643651	59.3000000	61.1000000	0.9300000	1.5966309
LOAF_VOL	202.3333333	14.6401275	189.0000000	218.0000000	214.3333333	7.2356479

VARIETY=SD3056

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.7666667	3.0664855	56.9000000	63.0000000	9.4033333	5.1307621
K_WT	36.8333333	9.5845362	28.7000000	47.4000000	91.8633333	26.0213651
LG	53.6666667	38.2143080	18.0000000	94.0000000	1460.33	71.2067850
SM	2.0000000	2.6457513	0	5.0000000	7.0000000	132.2875656
WHT_ASH	1.5500000	0.1868154	1.3500000	1.7200000	0.0349000	12.0526075
WHT_PRO	15.0333333	0.5686241	14.4000000	15.5000000	0.3233333	3.7824218
HARD	70.0000000	5.2915026	66.0000000	76.0000000	28.0000000	7.5592895
EXTR	57.6333333	6.0011110	51.7000000	63.7000000	36.0133333	10.4125697
FL_ASH	0.5300000	0.0346410	0.5100000	0.5700000	0.0012000	6.5360408
FL_PRO	14.3666667	0.6506407	13.7000000	15.0000000	0.4233333	4.5288216
MIXO	2.6666667	1.1547005	2.0000000	4.0000000	1.3333333	43.3012702
BAKE_ABS	60.1333333	1.4742230	59.0000000	61.8000000	2.1733333	2.4515903
LOAF_VOL	197.6666667	11.9303534	184.0000000	206.0000000	142.3333333	6.0355920

VARIETY=SD3080

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	61.6666667	2.0305993	60.3000000	64.0000000	4.1233333	3.2928637
K_WT	34.3333333	6.8391033	29.8000000	42.2000000	46.7733333	19.9197182
LG	43.6666667	37.4210280	15.0000000	86.0000000	1400.33	85.6970106
SM	1.3333333	1.5275252	0	3.0000000	2.3333333	114.5643924
WHT_ASH	1.5100000	0.2029778	1.2900000	1.6900000	0.0412000	13.4422405
WHT_PRO	16.2666667	0.3785939	16.0000000	16.7000000	0.1433333	2.3274215
HARD	66.0000000	9.0000000	57.0000000	75.0000000	81.0000000	13.6363636
EXTR	59.7666667	3.7004504	55.5000000	62.1000000	13.6933333	6.1914954
FL_ASH	0.4500000	0.0360555	0.4200000	0.4900000	0.0013000	8.0123362
FL_PRO	16.0000000	0.5567764	15.5000000	16.6000000	0.3100000	3.4798527
MIXO	3.0000000	1.0000000	2.0000000	4.0000000	1.0000000	33.3333333
BAKE_ABS	62.1333333	1.4843629	60.5000000	63.4000000	2.2033333	2.3889961
LOAF_VOL	205.0000000	11.5325626	193.0000000	216.0000000	133.0000000	5.6256403

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

WESTERN REGION

TABLE 62

VARIETY=SD8072

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.2666667	2.8988503	57.9000000	63.5000000	8.4033333	4.8100393
K_WT	33.2333333	9.5143751	26.4000000	44.1000000	90.5233333	28.6290123
LG	44.3333333	42.7239199	13.0000000	93.0000000	1825.33	96.3697442
SM	1.3333333	1.5275252	0	3.0000000	2.3333333	114.5643924
WHT_ASH	1.5466667	0.1814754	1.3400000	1.6800000	0.0329333	11.7333255
WHT_PRO	15.3333333	0.8082904	14.4000000	15.8000000	0.6533333	5.2714590
HARD	75.6666667	11.5902258	65.0000000	88.0000000	134.3333333	15.3174790
EXTR	59.5333333	3.1501323	56.4000000	62.7000000	9.9233333	5.2913756
FL_ASH	0.5100000	0.0360555	0.4700000	0.5400000	0.0013000	7.0697084
FL_PRO	15.0333333	0.6658328	14.3000000	15.6000000	0.4433333	4.4290431
MIXO	2.0000000	1.0000000	1.0000000	3.0000000	1.0000000	50.0000000
BAKE_ABS	60.0000000	1.0000000	59.0000000	61.0000000	1.0000000	1.6666667
LOAF_VOL	189.0000000	5.5677644	184.0000000	195.0000000	31.0000000	2.9459071

VARIETY=SD8073

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	58.9333333	2.8571548	56.2000000	61.9000000	8.1633333	4.8481133
K_WT	32.4000000	11.4642924	24.2000000	45.5000000	131.4300000	35.3836185
LG	38.3333333	46.8009971	6.0000000	92.0000000	2190.33	122.0895578
SM	3.6666667	3.0550505	1.0000000	7.0000000	9.3333333	83.3195581
WHT_ASH	1.5566667	0.1715615	1.4000000	1.7400000	0.0294333	11.0210786
WHT_PRO	15.2333333	1.0692677	14.0000000	15.9000000	1.1433333	7.0192626
HARD	73.3333333	10.2143690	66.0000000	85.0000000	104.3333333	13.9286850
EXTR	58.5333333	7.4574348	50.0000000	63.8000000	55.6133333	12.7404922
FL_ASH	0.5433333	0.0351188	0.5100000	0.5800000	0.0012333	6.4635913
FL_PRO	14.6000000	1.6462078	12.7000000	15.6000000	2.7100000	11.2753956
MIXO	3.3333333	1.1547005	2.0000000	4.0000000	1.3333333	34.6410162
BAKE_ABS	59.3666667	3.3857545	55.5000000	61.8000000	11.4633333	5.7031238
LOAF_VOL	187.0000000	15.7162336	176.0000000	205.0000000	247.0000000	8.4044030

VARIETY=SD8074

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	60.1000000	2.8160256	58.0000000	63.3000000	7.9300000	4.6855667
K_WT	30.8000000	7.1630999	25.3000000	38.9000000	51.3100000	23.2568178
LG	39.3333333	44.0605644	10.0000000	90.0000000	1941.33	112.0183840
SM	2.0000000	2.6457513	0	5.0000000	7.0000000	132.2875656
WHT_ASH	1.5333333	0.1674316	1.3400000	1.6300000	0.0280333	10.9194507
WHT_PRO	15.6333333	0.8144528	14.7000000	16.2000000	0.6633333	5.2097193
HARD	73.0000000	3.6055513	69.0000000	76.0000000	13.0000000	4.9391113
EXTR	58.7666667	6.1581924	51.9000000	63.8000000	37.9233333	10.4790568
FL_ASH	0.4966667	0.0152753	0.4800000	0.5100000	0.000233333	3.0755542
FL_PRO	15.1333333	0.9814955	14.0000000	15.7000000	0.9633333	6.4856528
MIXO	4.0000000	1.0000000	3.0000000	5.0000000	1.0000000	25.0000000
BAKE_ABS	60.3666667	0.4041452	60.0000000	60.8000000	0.1633333	0.6694840
LOAF_VOL	185.0000000	20.6639783	168.0000000	208.0000000	427.0000000	11.1697180

STATISTICAL EVALUATION OF UNIFORM REGIONAL NURSERY DATA

WESTERN REGION

TABLE 63

VARIETY=STOA

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	58.5000000	2.9512709	55.5000000	61.4000000	8.7100000	5.0449075
K_WT	28.6333333	8.7214295	22.4000000	38.6000000	76.0633333	30.4590089
LG	30.3333333	43.0851869	3.0000000	80.0000000	1856.33	142.0390778
SM	6.6666667	7.0237692	0	14.0000000	49.3333333	105.3565375
WHT_ASH	1.6200000	0.1808314	1.4300000	1.7900000	0.0327000	11.1624329
WHT_PRO	15.2333333	1.2423097	13.8000000	16.0000000	1.5433333	8.1552058
HARD	70.3333333	11.0151411	63.0000000	83.0000000	121.3333333	15.6613380
EXTR	58.5333333	3.9803685	54.1000000	61.8000000	15.8433333	6.8001740
FL_ASH	0.4733333	0.0208167	0.4500000	0.4900000	0.000433333	4.3978859
FL_PRO	15.0000000	1.3000000	13.5000000	15.8000000	1.6900000	8.6666667
MIXO	3.6666667	1.5275252	2.0000000	5.0000000	2.3333333	41.6597790
BAKE_ABS	60.7000000	0.6244998	60.2000000	61.4000000	0.3900000	1.0288300
LOAF_VOL	190.3333333	8.7368949	183.0000000	200.0000000	76.3333333	4.5903126

VARIETY=XW398A4

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VARIANCE	CV
TW	59.8000000	1.1789826	58.5000000	60.8000000	1.3900000	1.9715428
K_WT	34.9666667	11.4596393	27.0000000	48.1000000	131.3233333	32.7730390
LG	41.0000000	45.0777107	13.0000000	93.0000000	2032.00	109.9456358
SM	4.0000000	3.4641016	0	6.0000000	12.0000000	86.6025404
WHT_ASH	1.6266667	0.1365040	1.4700000	1.7200000	0.0186333	8.3916374
WHT_PRO	15.0666667	0.9073772	14.1000000	15.9000000	0.8233333	6.0224149
HARD	65.6666667	4.0414519	62.0000000	70.0000000	16.3333333	6.1544953
EXTR	58.8666667	4.8180217	55.6000000	64.4000000	23.2133333	8.1846349
FL_ASH	0.5766667	0.0650641	0.5100000	0.6400000	0.0042333	11.2827869
FL_PRO	14.7333333	0.9073772	13.7000000	15.4000000	0.8233333	6.1586686
MIXO	2.3333333	1.1547005	1.0000000	3.0000000	1.3333333	49.4871659
BAKE_ABS	59.8000000	1.1135529	58.6000000	60.8000000	1.2400000	1.8621285
LOAF_VOL	195.0000000	17.0587221	181.0000000	214.0000000	291.0000000	8.7480626

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=NORTH DAKOTA STATION=CASSELTON NURSERY=FIELD PLOTS

TABLE 64

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
MARSHALL		55.6	25.4	16	8	2.09	14.8	81	3	67.8	0.51	13.4	5	3	61.4	4
STOA		58.4	31.9	46	1	1.82	15.5	91	4	69.2	0.43	14.1	5	4	62.7	5
BUTTE 86		58.4	33.7	52	2	1.88	15.7	94	4	67.8	0.40	14.1	5	4	63.7	4
LEN	S	57.4	30.1	41	3	1.90	15.9	86	4	68.8	0.40	14.4	5	4	62.5	7

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=NORTH DAKOTA STATION=CASSELTON NURSERY=FIELD PLOTS

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	FN	DEFICIENCIES TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
MARSHALL		60.2	3.50	7	80	80	925	2	2.7	397	MJ	MI	MI		MJ					MJ					MI
STOA		61.9	4.50	9	80	80	940	3	3.7	384										MI					MI
BUTTE 86		62.8	3.00	7	80	85	925	4	4.0	400															
LEN	S	61.6	5.50	7	80	80	930	3	3.7	366	MI									MI	MI				MI

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	28.0	8	13.9	66.7	.47	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	75	80	875
MAJOR FAULTING VALUES	56.9	25.0	18	12.9	64.7	.51	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	50	50	825

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=NORTH DAKOTA STATION=LANGDON NURSERY=FIELD PLOTS

TABLE 65

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
LEN	S	56.8	26.0	32	7	1.96	14.8	63	3	67.2	0.38	13.4	5	4	59.6	4
MARSHALL		60.8	28.2	49	0	1.67	12.4	75	2	72.1	0.32	11.7	5	2	56.5	2
STOA		59.8	28.9	52	0	1.77	15.2	92	4	67.6	0.37	14.3	5	4	62.7	5

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=NORTH DAKOTA STATION=LANGDON NURSERY=FIELD PLOTS

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
LEN	S	58.5	5.50	9	80	70	900	2	3.0	MJ										MJ				MI
MARSHALL		55.9	3.00	2	85	80	830	1	1.7			MJ			MJ		MI	MJ	MJ		MJ		MI	MJ
STOA		61.9	3.50	9	85	65	950	3	3.7									MI					MI	

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	23.9	8	13.9	65.1	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	75	80	879
MAJOR FAULTING VALUES	56.9	20.9	18	12.9	63.1	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	50	50	869

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

TABLE 66

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=NORTH DAKOTA STATION=MINOT NURSERY=FIELD PLOTS

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
ALEX		59.7	32.5	48	2	1.46	15.4	76	4	70.0	0.34	14.4	5	4	63.1	4
COTEAU		58.1	29.5	24	2	1.49	17.1	81	4	70.6	0.38	16.1	5	4	66.1	4
LEN	S	59.5	34.6	74	0	1.49	15.7	71	4	71.4	0.34	14.6	5	4	64.4	6
MARSHALL		59.1	28.6	41	0	1.51	14.2	69	3	72.8	0.31	13.2	5	4	60.8	3
STOA		60.0	33.2	51	0	1.48	15.4	73	4	70.4	0.31	14.3	5	4	64.0	5

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=NORTH DAKOTA STATION=MINOT NURSERY=FIELD PLOTS

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	FN	DEFICIENCIES
ALEX		63.1	3.50	9	90	80	1035	4	4.0	394	MI
COTEAU		66.1	2.50	7	85	85	875	1	3.0	400	MI MI MJ
LEN	S	64.4	4.00	9	80	90	1030	4	4.0	400	
MARSHALL		60.8	3.25	9	85	85	970	2	3.0	400	MJ MI MI
STOA		64.0	4.00	9	85	90	1010	4	4.0	400	

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	32.5	8	13.9	69.3	.47	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	75	80	975
MAJOR FAULTING VALUES	56.9	29.5	18	12.9	67.3	.51	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	50	50	925

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=NEW YORK STATION=ITHACA NURSERY=FIELD PLOTS

TABLE 67

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
SINTON		59.5	30.9	55	2	1.72	15.7	64	4	67.5	0.40	14.4	5	3	61.4	3
HT BRAND 715		60.2	30.6	41	2	1.78	14.0	78	4	69.1	0.46	13.1	5	4	60.0	3
STOA	S	60.9	30.2	32	1	1.69	14.8	71	4	70.0	0.38	13.8	5	4	62.5	6
MARSHALL		60.8	30.3	36	2	1.87	14.4	77	4	71.6	0.32	13.5	5	4	60.0	3
ND 594		62.1	33.8	47	0	1.71	15.1	84	4	69.1	0.38	13.9	5	4	64.7	4
82080-0-4		62.2	30.3	40	2	1.85	15.0	67	4	70.0	0.43	13.7	5	4	60.0	3
82073-0-6		61.4	30.6	43	2	1.78	15.4	70	4	69.9	0.40	13.9	5	4	63.7	4
PF83699		61.4	29.4	30	5	1.77	14.0	39	4	66.2	0.32	12.2	4	1	58.2	2
AMIDON		60.9	32.2	43	2	1.60	15.1	87	4	69.9	0.38	13.7	5	4	61.4	4
GRANDIN		61.8	36.2	65	1	1.77	15.6	74	4	70.4	0.40	14.6	5	4	66.5	6
ND 652		60.2	33.1	53	1	1.73	15.7	77	4	69.5	0.38	14.8	5	4	63.4	2
NY 82011-2		61.3	35.7	60	1	1.77	15.6	70	4	70.4	0.43	14.7	5	4	63.4	3
NY 83030-2-3		60.7	30.8	34	1	1.76	14.8	65	4	68.5	0.36	13.8	5	4	65.1	5
IAS64/ALDAN"S"		59.5	38.6	63	1	1.77	14.5	79	4	70.0	0.43	13.4	5	4	61.1	2
NY82080-0-4		61.6	30.7	36	3	1.74	15.2	52	4	70.0	0.42	13.7	5	4	62.1	2
MG1		58.7	38.8	68	1	1.81	14.2	37	4	67.0	0.37	12.5	4	2	54.6	1
PF839204		59.8	36.4	48	2	1.75	15.0	19	4	62.0	0.32	12.8	3	1	54.6	1
CNT 10		61.4	35.6	60	1	1.87	15.1	23	4	65.8	0.31	13.4	3	1	60.3	2
PF83781		61.2	35.0	34	1	1.70	17.5	20	4	56.4	0.37	15.2	2	1	60.0	2
MARINGA		59.0	32.9	45	0	1.77	15.1	39	4	57.9	0.40	13.4	3	1	60.8	3

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=NEW YORK STATION=ITHACA NURSERY=FIELD PLOTS

TABLE 67 (CONT)

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	DEFICIENCIES TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
SINTON		61.4	2.75	9	85	80	905	1	2.7					MI					MI	MI				MI	MJ
HT BRAND 715		60.0	3.50	7	80	85	855	1	3.0										MJ					MJ
STOA	S	62.5	4.25	9	80	85	950	4	4.0															
MARSHALL		60.0	3.00	9	85	85	955	2	3.3										MJ					
ND 594		64.7	3.50	9	80	80	930	4	4.0														MI	
82080-0-4		60.0	3.25	9	80	85	895	1	3.0										MJ					MJ
82073-0-6		63.7	3.00	9	80	85	1005	4	4.0															
PF83699		58.2	2.00	7	80	85	835	1	2.0					MI		MJ		MI	MJ	MI				MJ
AMIDON		61.4	3.00	9	80	85	970	3	3.7										MI					
GRANDIN		66.5	3.75	9	80	85	1035	4	4.0															
ND 652		63.4	3.75	9	80	85	1035	4	4.0									MI						
NY 82011-2		63.4	3.00	9	80	80	1035	4	4.0														MI	
NY 83030-2-3		65.1	4.00	9	80	85	1025	4	4.0															
IAS64/ALDAN"S"		61.1	3.00	7	80	80	905	1	3.0									MI	MI				MI	MJ
NY82080-0-4		62.1	3.25	9	80	85	920	3	3.7									MI						MI
MG1		54.6	2.75	7	80	85	880	1	2.3					MI		MI		MJ	MJ	MI				MJ
PF839204		54.6	2.00	5	80	90	780	1	2.0					MJ		MI	MI	MJ	MJ	MI	MI			MJ
CNT 10		60.3	1.50	5	85	85	890	1	2.0					MJ			MI	MI	MJ	MJ	MI			MJ
PF83781		60.0	2.75	9	85	80	1000	1	2.0					MJ			MJ	MI	MJ	MI			MI	
MARINGA		60.8	2.00	5	80	85	855	1	2.0					MJ			MI		MI	MI	MI			MJ

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	28.1	8	13.9	67.9	.57	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	75	80	929
MAJOR FAULTING VALUES	56.9	25.1	18	12.9	65.9	.61	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	50	50	919

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=CALIFORNIA STATION=IMPERIAL VALLEY NURSERY=FIELD PLOTS

TABLE 68

VARIETY	STD	TEST WT #/BU	1000 K.WT G.	SIZING LG %	SIZING SM %	WHT ASH %	WHT PRO %	HARD-NESS	WHEAT SCORE ***	FLR EXT %	ASH @ 65%EX %	FLR PRO %	MILL CHAR	MILL SCORE ***	MIX ABS %	MIX PAT
ANZA		64.7	36.1	66	0	1.42	11.2	78	1	72.0	0.34	10.0	5	2	56.2	1
YECORA ROJO	S	64.7	46.9	73	0	1.57	13.8	82	3	71.5	0.35	12.5	5	3	62.1	3
YOLO		64.1	36.0	56	0	1.52	11.3	91	1	73.4	0.35	10.4	5	2	57.9	1
KLASIC		65.8	49.3	88	0	1.46	13.4	81	3	74.4	0.32	12.3	5	2	60.0	3
TADINIA		61.7	31.4	26	4	1.56	12.0	76	1	69.6	0.44	10.8	5	2	55.5	1
SERRA		63.6	43.3	64	0	1.60	12.3	68	2	72.5	0.42	11.1	5	2	56.5	1
BAKER		64.4	45.7	72	0	1.55	13.9	104	3	70.9	0.36	12.8	5	3	59.3	2
EXPRESS		63.8	42.6	71	0	1.60	13.5	107	3	70.3	0.39	12.6	5	3	61.8	2
FMC BR 5144		64.5	37.7	68	0	1.47	11.2	78	1	73.5	0.37	10.2	5	2	56.2	1
CONT BR 5702		63.8	47.4	75	0	1.54	13.4	86	3	71.9	0.33	12.1	5	2	59.0	2
CONT BR 5710		64.2	44.1	75	0	1.49	14.0	78	4	71.3	0.33	13.5	5	4	60.8	2
CONT BR 5738		63.7	41.2	61	0	1.54	13.5	85	2	70.6	0.36	13.0	5	4	60.0	2
UC 842		62.4	38.3	56	0	1.59	13.2	76	2	70.8	0.33	12.3	5	2	56.2	2
UC 844		60.9	32.9	30	6	1.68	13.9	85	2	67.9	0.41	12.8	5	2	57.3	2
UC 849		65.1	36.9	72	0	1.56	14.2	87	3	72.5	0.36	13.3	5	4	61.4	3
PIONEER RB10104		62.7	46.9	80	0	1.60	11.9	97	2	69.6	0.46	11.6	5	2	58.2	1
PIONEER RB10161		65.0	41.7	75	0	1.58	12.3	94	1	67.3	0.44	11.5	5	1	59.6	2
ACCORD		62.7	42.0	58	0	1.61	13.3	79	3	72.0	0.44	12.3	5	2	60.3	3
PH986-61		63.8	47.4	84	0	1.51	14.3	84	4	71.4	0.35	13.1	5	4	60.8	4
TANORI 87W		64.2	42.6	66	0	1.46	12.6	85	2	71.6	0.32	12.2	5	2	57.9	2
UC895		64.9	35.1	40	0	1.52	12.6	92	1	73.0	0.41	11.9	5	2	60.0	2
UC896		64.3	39.2	58	0	1.46	12.4	86	1	68.7	0.37	11.4	5	1	60.0	2
UC897		64.9	37.9	66	0	1.59	12.6	98	1	70.4	0.45	11.5	5	2	61.8	3
UC898		65.6	41.8	86	0	1.53	13.3	102	2	71.7	0.35	12.4	5	2	62.5	3
PH986-12W		64.7	49.8	89	0	1.44	14.0	92	4	72.6	0.35	13.0	5	4	61.1	3
DA987-118		63.4	41.2	64	0	1.56	12.2	94	1	71.2	0.38	11.3	5	2	56.5	2
PH988-131		64.3	43.3	65	0	1.57	13.5	90	3	71.8	0.36	12.4	5	2	60.8	3
CONT BR 5237		64.6	35.8	42	0	1.51	11.8	109	1	70.9	0.42	10.8	5	2	57.3	2
FMC 5187		62.6	35.2	38	0	1.57	13.3	96	2	68.6	0.39	11.8	5	1	60.3	3
FMC 5680		64.0	43.1	63	0	1.57	13.4	86	3	70.6	0.38	12.2	5	2	58.6	2
FMC 5569		61.7	36.5	43	0	1.63	13.5	91	2	69.0	0.47	12.6	5	2	61.1	4
FMC 6128		63.3	40.2	64	0	1.57	12.2	99	1	70.4	0.47	11.5	5	2	59.0	3
YECORA ROJO 90W		64.2	43.1	69	0	1.50	13.2	79	3	70.4	0.41	11.7	5	2	60.5	4
YECORA BLANCO90		63.7	36.8	50	0	1.63	13.3	89	2	68.8	0.46	12.3	5	1	59.3	3
PIONEER RB10130		64.3	36.9	62	0	1.46	11.5	92	1	71.8	0.34	10.7	5	2	57.3	1
PIONEER HBY334		61.3	37.7	43	0	1.63	11.8	82	1	69.7	0.43	10.5	5	2	57.3	2
PIONEER WBC122		60.0	30.9	20	6	1.82	13.5	45	2	67.3	0.50	12.3	4	1	52.6	1

QUALITY DATA OF SPRING WHEAT SAMPLES 1991 CROP
STATE=CALIFORNIA STATION=IMPERIAL VALLEY NURSERY=FIELD PLOTS

TABLE 68 (CONT)

VARIETY	STD	BAKE ABS %	MIX TIME MIN	DOUGH CHAR	CRUMB COLOR	CRUMB GRAIN	LOAF VOL CC	BAKE SCORE ***	GENERAL SCORE ***	FN	DEFICIENCIES TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MT	DC	CC	CG	LV
ANZA		55.4	1.75	2	85	30	580	1	1.3	400	MJ			MJ			MJ		MJ	MJ	MJ	MJ		MJ	MJ
YECORA ROJO	S	61.1	4.00	5	95	75	855	3	3.0	400				MI			MI			MI		MI		MI	
YOLO		56.9	2.00	2	80	90	735	1	1.3	400	MJ			MJ			MJ		MJ	MJ	MI	MJ			MJ
KLASIC		58.8	4.75	9	85	70	900	2	2.3	400				MI			MJ			MJ				MI	
TADINIA		54.9	3.00	2	90	85	715	1	1.3	400	MJ			MJ			MJ		MJ	MJ		MJ			MJ
SERRA		56.0	4.50	2	95	85	855	1	1.7	383	MI			MJ			MJ		MJ	MJ		MJ			
BAKER		58.7	4.25	2	90	75	850	1	2.3	400				MI			MI		MI	MJ		MJ		MI	
EXPRESS		61.0	2.25	2	85	80	915	1	2.3	400	MI			MI			MI		MI	MI	MI	MJ		MI	
FMC BR 5144		55.6	2.00	0	80	80	690	1	1.3	400	MJ			MJ			MJ		MJ	MJ	MI	MJ		MI	MJ
CONT BR 5702		58.3	4.25	5	80	80	815	2	2.3	400				MI			MJ		MI	MJ		MI		MI	
CONT BR 5710		60.0	3.50	5	95	75	845	2	3.3	400	MI								MI	MJ		MI		MI	
CONT BR 5738		59.1	4.25	5	95	75	845	2	2.7	400	MJ			MI					MI	MJ		MI		MI	
UC 842		55.4	5.50	2	90	85	715	1	1.7	400	MJ			MI			MJ		MI	MJ		MJ			MJ
UC 844		56.4	5.25	0	85	30	775	1	1.7	400	MJ			MI	MI		MI		MI	MJ		MJ		MJ	MI
UC 849		60.7	2.75	7	85	85	885	2	3.0	400	MJ									MI	MI				
PIONEER RB10104		57.3	2.50	2	70	80	725	1	1.7	266				MJ			MJ		MJ	MJ	MI	MJ	MI	MI	MJ
PIONEER RB10161		58.9	3.00	2	100	80	770	1	1.0	400	MJ			MJ	MJ		MJ		MI	MJ		MJ		MI	MI
ACCORD		59.3	4.50	2	95	80	825	1	2.0	400	MI			MI			MJ			MJ		MJ		MI	
PH986-61		60.1	3.75	9	95	80	905	2	3.3	400										MJ				MI	
TANORI 87W		57.3	2.50	5	85	85	775	1	1.7	400	MI			MJ			MJ		MI	MJ	MI	MI			MI
UC895		59.3	2.25	5	80	85	825	1	1.3	400	MJ			MJ			MJ		MI	MJ	MI	MI			
UC896		59.1	2.50	2	85	85	740	1	1.0	400	MJ			MJ	MI		MJ		MI	MJ	MI	MJ			MJ
UC897		61.2	2.00	5	85	90	815	2	1.7	392	MJ			MJ			MJ			MI	MI	MI			
UC898		61.8	2.50	5	85	85	835	2	2.0	400	MJ			MI			MJ			MI	MI	MI			
PH986-12W		60.6	3.50	7	85	80	885	3	3.7	400										MI				MI	
DA987-118		56.2	5.00	5	85	70	650	1	1.3	400	MJ			MJ			MJ		MI	MJ		MI		MI	MJ
PH988-131		60.1	3.75	5	90	80	860	2	2.3	400	MI			MI			MJ			MJ		MI		MI	
CONT BR 5237		56.8	4.25	5	90	70	710	1	1.3	400	MJ			MJ			MJ		MI	MJ		MI		MI	MJ
FMC 5187		59.6	4.25	7	85	75	795	1	1.3	400	MJ			MI	MI		MJ			MJ				MI	MI
FMC 5680		57.9	4.25	7	95	75	855	2	2.3	400	MI			MI			MJ		MI	MJ				MI	
FMC 5569		60.1	4.75	7	80	80	895	2	2.0	400	MJ			MI	MI	MI	MI			MJ				MI	
FMC 6128		58.1	4.00	5	80	85	750	1	1.3	400	MJ			MJ		MI	MJ			MJ		MI			MJ
YECORA ROJO 90W		59.6	4.25	7	90	80	840	2	2.3	400	MI			MI			MJ			MJ				MI	
YECORA BLANCO90		58.4	5.00	7	85	80	800	1	1.3	400	MJ			MI	MI		MJ			MJ				MI	MI
PIONEER RB10130		56.6	2.75	0	20	20	430	1	1.3	400	MJ			MJ			MJ		MJ	MJ	MI	MJ	MJ	MJ	MJ
PIONEER HBY334		56.2	3.50	2	80	75	675	1	1.3	400	MJ			MJ			MJ		MI	MJ		MJ		MI	MJ
PIONEER WBC122		51.5	4.00	2	80	75	675	1	1.3	354	MJ			MI	MJ	MI	MJ		MJ	MJ		MJ		MI	MJ

DEFICIENCIES	TW	KW	SM	WP	EX	A65	FP	MC	MX	BA	MIX TIME (MT)		DC	CC	CG	LV
MINOR FAULTING VALUES	57.9	44.8	8	13.9	69.4	.47	12.9	3	2,7,8	61.9	5.75-8.00	2.00-2.75	6	75	80	800
MAJOR FAULTING VALUES	56.9	41.8	18	12.9	67.4	.51	12.4	2	1,9-11	60.4	UNDER 1.75	OVER 8.00	4	50	50	750

*** 1=NO PROMISE 2=LITTLE PROMISE 3=SOME PROMISE 4=GOOD PROMISE.